

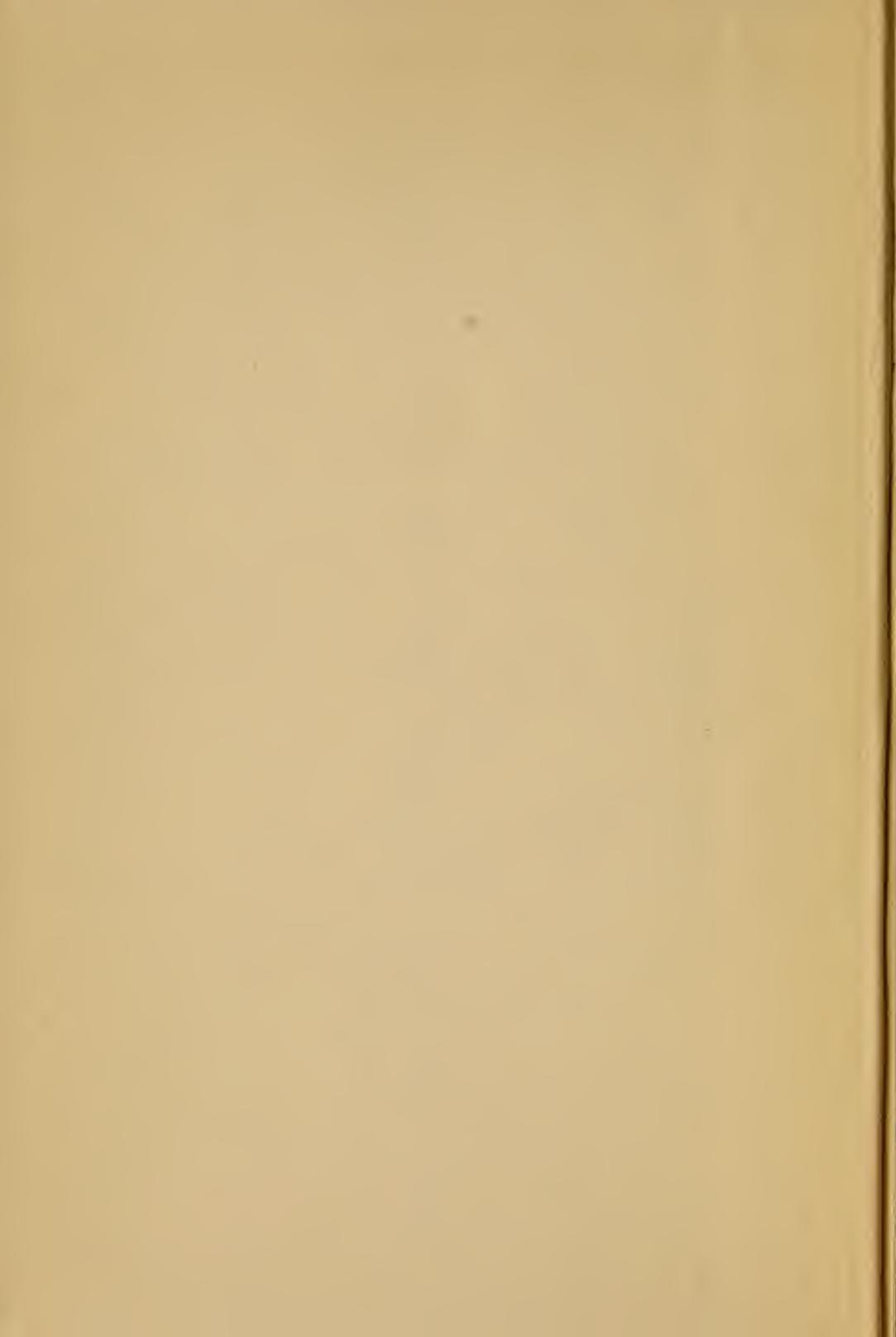
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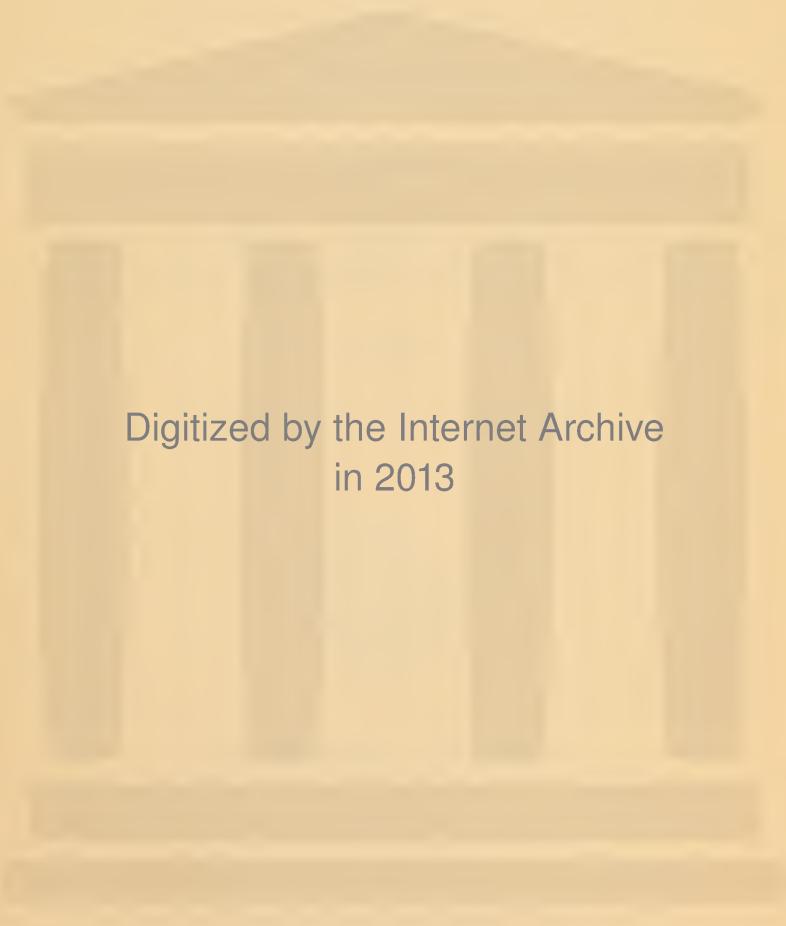
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DEPARTMENT OF WATER RESOURCES
—
TWENTY-EIGHTH BIENNIAL REPORT
OF THE
STATE ENGINEER
TO THE
GOVERNOR OF COLORADO
FOR THE YEARS
1935-1936





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DEPARTMENT
OF
WATER RESOURCES

Twenty-Eighth Biennial
Report

OF THE

STATE ENGINEER

TO THE

Governor of Colorado



For the Years 1935-1936

M. C. HINDERLIDER
State Engineer

LETTER OF TRANSMITTAL

Sir:

In compliance with provisions of law, I transmit herewith for your information and consideration the Twenty-eighth Biennial Report of the activities of the Department of Water Resources for the calendar years 1935 and 1936.

Respectfully yours,

M. C. HINDERLIDER,
State Engineer.

To His Excellency,

ED. C. JOHNSON,
Governor.

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LIST OF OFFICERS AND EMPLOYEES

State Engineering Department

M. C. Hinderlader.....	State Engineer
C. C. Hezmalhalch.....	Deputy State Engineer
L. T. Burgess.....	Chief Hydrographer
W. T. Blight.....	Chief Clerk and Draftsman
Edith Plunkett.....	Secretary and Stenographer
Jessie James.....	Stenographer
C. E. Sehnurr.....	Hydrographer, Div. 1
J. E. Whitten.....	Hydrographer, Div. 1
F. C. Snyder	Hydrographer, Div. 2
W. W. Wheeler.....	Hydrographer, Div. 2
D. S. Jones, Jr.	Hydrographer, Div. 3

IRRIGATION DIVISION ENGINEERS

Div. No. 1—C. C. Hezmalhalch, Deputy State Engineer.....	Denver
Div. No. 2—C. W. Beach.....	Pueblo
Div. No. 3—W. D. Carroll.....	Alamosa
Div. No. 4—F. S. Hotchkiss.....	Montrose
Div. No. 5—L. C. Finley.....	Glenwood Springs
Div. No. 6—B. T. Chase.....	Steamboat Springs
Div. No. 7—J. R. Williams	Durango

WATER COMMISSIONERS

Div.	Dist.	
No.	No.	
1	1	J. L. Samples.....Ft. Morgan
1	2	Stewart V. Wallace .....Ft. Lupton
1	3	W. J. McAnelly.....Ft. Collins
1	4	H. H. Kelly .....Loveland
1	5	C. J. Maier, 516 Bross St. ....Longmont
1	6	T. L. Platt, 2236 Mapleton Ave. ....Boulder
1	7	A. E. Jones .....Golden
1	8	C. M. Hall, 3490 South Broadway .....Englewood
1	9	J. W. Van Gorden.....Morrison
2	10	J. M. Pribble, 1020 N. Wahsatch.....Colorado Springs
2	11	J. A. Burnett.....Poncha Springs
2	12	D. S. Jones.....Canon City
2	13	H. W. Hendershot.....Westcliffe
2	14	Joseph Russ.....Pueblo
2	15	John Simonson .....Beulah
2	16	H. W. Craig.....La Veta
2	17	S. W. Cressy.....Rocky Ford
2	18	Juan A. Mestas.....Aguilar
2	19	H. B. Bostick.....Trinidad
3	20	Thomas Carr .....Del Norte
3	21	T. M. Orman .....La Jara
3	22	L. W. Sowards.....Manassa
1-2	23	J. Desserich .....Hartsel
3	24	Fares Gold .....San Luis
3	25	John L. Charles.....Crestone
3	26	Ira Colvin .....Saguache
3	27	Jas. Medina .....La Garita
4	28	J. Roy Hicks.....Sargent's
7	29	Joe T. Chambers, Com. at Large '34.....Pagosa Springs
7	30	George H. Tyner.....Falfa
7	31	Albert Larsen.....Tiffany
7	32	No Commissioner.....
7	33	Jerry Griggs .....Breen
7	34	Hugo Weston.....Cortez
3	35	George Opinear.....Blanca
5	36	No Commissioner.....
5	37	B. F. Long.....Eagle

WATER COMMISSIONERS (Continued)

Div.	Dist.		
No.	No.		
5	38	P. K. Bartheel.....	Carbondale
5	39	Isam W. Graham.....	Rifle
4	40	C. H. Luellen.....	Eckert
4	41	Dexter B. Walker.....	Montrose
4	42	George M. Saunders.....	Mesa
6	43	F. A. Carstens	Meeker
6	44	Eben Hamilton.....	Craig
5	45	Frank Taughenbaugh.....	Rifle
1	47	Clarence Boston.....	Walden
1	48	R. A. Mosier.....	Jelm, Wyo.
2	49	No Commissioner	
5	50	No Commissioner	
5	51	P. S. Elting.....	Sulphur Springs
5	52	Carl Forster.....	Radium
5	53	Chas. Plasters.....	Gypsum
6	54	Frank D. Baxter.....	Slater
6	55	No Commissioner	
6	56	No Commissioner	
6	57	A. R. Goree.....	Hayden
6	58	Wilbur Rule.....	Steamboat Springs
4	59	Leon H. Dutemeyer (Com. at Large).....	Gunnison
4	60	N. J. Clark.....	Redvale
4	61	Ralph G. Stocks.....	Paradox
4	62	Leon H. Dutemeyer (Com. at Large).....	Gunnison
4	63	No Commissioner	
1	64	Pat Marsh	Sterling
1	65	John Hultquist	Wray
2	67	R. J. McGrath.....	Lamar
4	68	Dean S. Hainey.....	Ridgway
7	69	F. C. Hardman.....	Cedar
5	70	Geo. Maxwell Anderson.....	DeBeque

CHAPTER I**FINANCIAL STATEMENT****FEES RECEIVED BY OFFICE DURING BIENNIUM**

January 1, 1935 to December 31, 1936

Filings	\$5,634.00
Sale of Blueprints.....	852.30
Certifications	188.00
Examination of Dam Plans.....	252.00
Filing Transfer Decrees.....	22.00
Recording Transfer of Filings.....	4.00
Office Labor.....	21.25
Postage .....	.75
Total	\$6,974.30
Deposited with State Treasurer.....	\$6,974.30

APPROPRIATIONS

	Balance Turned Back to General Fund from Appropriation at End of Fiscal Year	June 30, 1935	June 30, 1936
State Engineer, Salary		\$ 9,425.00	\$.00
Deputy State Engineer, Salary		5,825.00	.00
Chief Hydrographer, Salary		4,710.00	.00
Chief Clerk, Salary		3,950.00	.08
Stenographer		2,820.00	.00
Special Deputy State Engineer, Salary		4,900.00	.00
Five Hydrographers, Salaries.....		17,850.00	246.50
Five Division Engineers, Salaries.....		24,500.00	.00
Traveling and Contingent Fund—			.28
State Engineer and Deputy		4,000.00	144.62
Chief Hydrographer.....		1,200.00	.00
Five Hydrographers.....		10,000.00	178.95
Five Division Engineers.....		8,000.00	.00
Special Deputy State Engineer		1,000.00	.00
Incidental Expense, Including Gage Readers' Salaries, etc.		8,000.00	53.09
General Incidental Expenses, Including Office Expense		3,000.00	103.79
Engineers' Emergency		5,000.00	.00
Totals		\$114,180.00	\$ 727.03
			<u>\$ 1,279.89</u>

CHAPTER II

ADMINISTRATION

Subnormal water supplies during the irrigation season of 1935 materially increased the difficulties of administration with which this Department is continually confronted—these difficulties involving open defiance of the authority of the local water commissioner, and special deputies appointed to assist the Water Commissioner in Water District No. 11. After every effort to induce a number of the violators to refrain from opening headgates had failed, and after the local law enforcement agencies appeared to be impotent in stopping such practices, the State Engineer, with the approval of the Attorney General requested Governor Johnson to ask that the military arm of the state be used to restore authority. Following a public hearing before the Governor and Attorney General at Salida on August 18, 1935, the offenders agreed to not molest their headgates further, nor to interfere with the administrative duties of the water officials in the future. It is with much gratification that we are able to report that this pledge has been kept by those making the same.

As in recent former years, two special assistants were depurated to assist the water commissioner in that Water District during the season of 1935-1936. While some violations of the orders of the water officials in District No. 11 occurred, these were limited to two or three persons, and we believe did not have the sanction of the management of the ditches in question.

In Water District No. 23, being the head waters of the South Platte River, more or less difficulty has always been encountered in the administration of the court decrees. We are pleased to state, however, that, during the last year, this Department has had better cooperation from the water users in that District than ever before.

Considerable difficulty with ditch owners arose in different parts of the Colorado River basin, which resulted in a number of arrests and fines, which seemed to have had a salutary effect.

Very few violations of the orders of the water officials occur in the plains region of the state, but in certain other localities will be found individuals who cannot, or refuse to, understand the nature of a water right, and easily convince themselves that their own need is the only measure of the right to take. The diminishing number of such violations, however, is gratifying and justification for the hope that, in years to come, such practices will be classed with those of the "free booter" days and thoroughly frowned upon by all good citizens.

The more efficient and accurate methods for measuring and accounting for all the water supplies of the state during the past few years, have resulted in better understanding and more effective cooperation between the water users and the water officials. At the present time, practically all the ditches and canals in the

state are equipped with modern, effective, or reasonably effective, measuring devices, and the larger or more important canals and ditches are equipped with automatic water stage recorders. In this connection, 208 stream gaging stations, equipped with automatic recording instruments, are maintained for obtaining a record of the natural water supplies of the state, and for administrative purposes.

In the past two years, many new reinforced concrete Parshall measuring flumes have been installed in the larger canals in the South Platte basin and tributaries thereof. These installations were made under the direct supervision of this office, with the advice and assistance of the U. S. Bureau of Agricultural Engineering. Several new installations were also made in the Arkansas and Rio Grande Valleys, and in the Colorado River basin. The cordial cooperation of the water users in almost every instance has made possible this program for improving the service.

During the past biennium, additional duties thrust upon this office have made it impossible to visit many localities as frequently as was desired. It is realized that the most efficient administration of the duties of this office requires frequent and close contact with the water users. In addition to his regular statutory duties, the State Engineer for the past four years has been charged with the duties of Interstate River Commissioner, and in this connection has been called upon to attend numerous interstate conferences and hearings, and to prepare drafts for interstate compacts, and in addition has had an active part in the interstate suits in which our state is involved. The State Engineer is also an ex-officio member of the State Planning Commission, and of the State Board of Conservation, Secretary-Treasurer of the State Board of Examiners for Engineers and Land Surveyors, Chairman of the State Irrigation District Commission, State Director of the National Reclamation Association, and has several other connections of lesser importance.

Within the past four years, he has also been called upon to make numerous trips to Washington in behalf of the attempts of our water users to obtain federal aid, and in the interest of a statewide water conservation program. These additional duties have demanded the expenditure of much extra energy and time, and only the support of an efficient and loyal organization has made this possible. These additional duties have been carried on without additional office force, and upon reduced appropriations by the Legislature. Several employees in this Department, receiving salaries of from \$115 to \$150 per month for the same kind, or similar duties, for which employees in other state departments, and in the federal service, are receiving considerably larger compensations, have had no increase in compensation for many years. During the more than thirteen years which the present State Engineer has occupied the office, there has been effected, through the concentration of duties, reduction of employees and, through other means, a saving to the taxpayers of

substantially \$100,000. It is our firm belief that the efficient administration of the functions and duties of this Department is of such importance to the major industries and future welfare of our state, that more adequate appropriations for its support are fully justified. The present annual cost to the water users out of legislative appropriations amounts to but 1.6 cents per acre of land irrigated. For the past biennium, the Legislature appropriated for Water Defense purposes, and for the negotiation of Interstate Compacts, the sum of but \$30,000, which sum was expected to take care of the cost of defending two important interstate suits in the Supreme Court of the United States, and one suit in the Supreme Court of Colorado, the negotiation of two or three interstate compacts, and the field investigations and engineering studies necessary in this connection. For similar purposes, the Legislatures of two of our sister states appropriated more than three times the above amount for the prosecution and defense of but one interstate suit.

Soon after the appropriation of \$30,000 was made available by the last Legislature, more than one-half of the same was pledged to federal agencies for investigations on one interstate stream alone. While a comparatively large sum of money in the aggregate has been appropriated by the General Assembly of Colorado in past years, for the protection of our natural water resources, the sum total represents but a small fraction of the value of the water which has been saved to the people of our state as a result of interstate compacts which have been negotiated, or of successful suits with sister states. It is to be hoped that in years to come, the people of this state may have a truer understanding of the immeasurable values attaching to its natural water supplies, and what has been accomplished in the defense of the same.

Today Colorado consumes practically all the dependable water supplies furnished by the South Platte and Arkansas Rivers, and the major portion of the water supplied by the Rio Grande in this state. These uses, we believe, are protected by prior beneficial application, by interstate compacts, or by Supreme Court decisions.

With respect to the Colorado River basin, uses of water in Colorado have never been attacked, or probably seriously threatened, by agencies outside our state. Everything possible that could have been done, has been done thus far by the state to protect present uses, and to safeguard the future interests of our citizens in the waters of the Colorado River basin. Engineering investigations and studies carried on independently by this Department, and also in conjunction with federal agencies, have resulted in a well balanced program of development for the future, designed to conserve and place to beneficial use all the remaining available water supplies in our state to the fullest extent of the needs of our people, subject to the equitable interest in the same, which may be vested in our sister states.

CHAPTER III

GENERAL REPORT ON SEASONAL AND CROP CONDITIONS For Years 1935 and 1936

As a result of the extreme drouth of 1934, together with sub-normal precipitation during the winter and the exceptionally dry, warm spring, the outlook for the season of 1935 presented the most serious situation with which the agricultural interests of the state were ever confronted. This condition was general throughout the state, and was further aggravated in the Arkansas and South Platte drainage basins by the lack of water in storage at the beginning of the season of 1935, the decrease in seepage return, and the great dust storms.

The winter of 1934-1935 in the Arkansas River basin was dry and mild, and all available water was diverted for direct irrigation. In the spring of 1935, the river was practically dry at Pueblo on several occasions, and the City of Pueblo was confronted with the most severe water shortage in its history.

Demand was made for water for direct irrigation in the South Platte River basin on February 4th, one of the earliest dates of record. On March 13th, there was not sufficient water in the river to supply priorities of date junior to May 1, 1865, and on April 16th priorities junior to December 1, 1863, were without water. As a result of the decrease in the amount of seepage return, there was not sufficient water in the upper part of District No. 1 to supply the Bijou Ditch priority, of date April 20, 1873, this being the first time of record this condition has occurred. Had the dry conditions continued throughout the growing season, a major calamity would have resulted to the agricultural interests, and in many instances diminished supplies for towns and cities would have been exhausted.

Fortunately, this condition was relieved by heavy snows and rains in the late spring of 1935, and by above-normal precipitation during the summer months. Thus, the situation was changed from one of extreme drouth to one of nearly normal water supply.

In the San Luis Valley, heavy snows in March brought moisture conditions up to normal, which, together with frequent rains during the growing season, resulted in above-normal crop yields. This condition was general throughout the state.

Due to precipitation of the greatest observed intensities, floods of unprecedented magnitude occurred on the Fountain, Monument, Horse Creek, and many other tributaries of the Arkansas River on Cherry, Kiowa, and Bijou Creeks of the South Platte drainage basin, and in the Arickaree and Republican River valleys where damage to lands was very great. Damage to canals and irrigation structures on the South Platte River was of larger proportions, and several large canals were unable to divert water for a number of weeks.

In general, crops were of average yield and quality, resulting in the best price return to the farmers for a number of years.

Considerable storage water was carried over for use in 1936.

1936

Although the winter of 1935-1936 was dry and cold in the lower elevations, normal snowfall in the upper reaches of the drainage basins, together with copious rains in April and May, produced a year of nearly normal water supply.

In the South Platte drainage basin, water supply conditions, both as to time and quantity, were excellent. In District No. 2 the water supply was one of the best of record. On only one occasion was water called from District No. 7 to supply senior priorities in District No. 2, a condition which very seldom obtains.

During the season, some 10,080 acre feet of water from the Moffat Tunnel diversion was exchanged with Clear Creek and South Platte River, to the credit of the City of Denver. Crops were of average yield and quality.

In the Arkansas Valley, the runoff, as measured at Pueblo, was ninety per cent (90%) of normal, and throughout the basin, the water supply varied from eighty per cent (80%) to above normal. Crops as to yield and price were good, and well above the average for the past five years.

The San Luis Valley had one of the best years in its history. Ample rains during the growing season, with a near-normal runoff in the streams, provided ample water for the maturing of crops. Some phenomenal yields of potatoes per acre were reported. Prices were well above the average.

On the Western Slope, with the exception of the Yampa River drainage basin, the runoff was nearly normal, and crops in general were fair. In the Yampa drainage basin, particularly on tributary streams, the water supply was short, which reduced crop yields in some instances as much as fifty per cent (50%).

Shortage of water on numerous tributaries in the Colorado River drainage basin was experienced, proving again the necessity for storage on small streams of the Western Slope.

Prospects for 1937, as to storage, are much improved over the past few years. Seepage return in the South Platte River has returned to normal. In the past few years, subnormal precipitation and runoff, the lowering of the ground water level, and the reduction in amount of seepage return, has materially increased the headgate draft on the available water supply for raising the water table beneath the irrigated lands.

CHAPTER IV

ACTIVITIES OF HYDROGRAPHIC DIVISION

By L. T. BURGESS, Chief Hydrographer

It may well be said that the nation, states, and local communities have become more water-conscious in recent years, which has emphasized the great importance of the hydrographic work of this Department, in both the administration of the water decrees and in planning the further conservation of the water resources of the state. This latter activity has been stimulated through grants of large sums of money from federal sources for the study and planning of water projects of all types throughout the nation.

Colorado probably is better equipped to provide indispensable data concerning its water resources than most any other state, particularly of the West, due to the continued, long-time program of stream gaging which has been carried on since about 1880. Constant requests for streamflow data are being received from federal agencies, associations, districts, and individuals interested in the important problem of water conservation. While the major use of streamflow data has been in connection with irrigation, the activities of the U. S. Army Engineers, as a result of the enactment of the Flood Control Acts of 1936 and 1938, have increased the demands for records of streamflow for use in flood-prevention studies.

From the small beginnings in 1880, and by means of the wholly inadequate appropriations made from year to year for the purpose of water supply studies in this state, the hydrographic work of the state has been expanded from a total of one hundred forty stream gaging stations maintained in 1934 to one hundred eighty-five stations in 1936. These stations are equipped with automatic water stage recording instruments, and more recently with the highest type of installations and gaging equipment.

At the present time, and for several years past, there are regularly employed five hydrographers, working under the supervision of a chief hydrographer, who give their entire time to hydrographic work throughout the state. In addition, two of the Irrigation Division Engineers perform a certain amount of stream gaging work in connection with their regular administrative duties. In 1935, the state hydrographers traveled a total of 88,429 miles, during which time they obtained 1,371 measurements of stream discharge in the South Platte, Arkansas, and Rio Grande basins. In the North Platte and Colorado River

basins, the hydrographic work was carried on by the U. S. Geological Survey in cooperation with this Department. In 1936, the state hydrographers traveled 97,328 miles and made 1,625 discharge measurements in the same river basins. This was an average of 64.5 miles traveled per stream measurement in 1935, and 59.9 miles per measurement in 1936, or an average of 62.2 miles per measurement for the biennium.

Under a cooperative agreement between this Department and the U. S. Geological Survey, which has been in operation for several years, each of these agencies contributes toward hydrographic investigations in the state on substantially an equal basis. During the fiscal year 1935-1936, Colorado contributed from state appropriations \$25,612.96 for hydrographic investigations alone, which amount was substantially matched by \$23,914.31 contributed by the U. S. Geological Survey. Within the fiscal year 1936-1937, this Department expended from legislative appropriations \$25,088.58, which was substantially matched by the Geological Survey by an expenditure of \$24,437.89, and an additional \$1,500 was expended in obtaining records at the Colorado River station at Glenwood Springs during each fiscal year.

I desire to herein express my appreciation of the fine cooperation this Department has received from the Water Resources branch of the U. S. Geological Survey in the planning and execution of the cooperative agreement, under which the hydrographic investigations of this state have been carried out during the past biennium. Through this cooperation, both in funds and in planning and execution, many new river gaging stations have been installed throughout the state, while a large number of old gaging stations have been rehabilitated and modernized. During the fiscal year 1935-1936, this office spent \$3,000 from the U. S. Geological Survey cooperative fund on rehabilitation of gaging stations in basins other than the Colorado River Basin.

Under the cooperative agreement, state funds expended on stream gaging and related office work only, may be set up to be matched by the Geological Survey on the fifty-fifty basis. These expenditures are for hydrographers' salaries, traveling expense, supplies and equipment, office administration, and computation of stream flow data. Expenditures for canal ratings, and related work, cannot be included in state expenditures under the cooperative agreement. This requirement limits the amount of state funds available for cooperative purposes. The amounts of state funds now expended on hydrographic investigations in Colorado constitute approximately 49 per cent of the total amount of money appropriated by the Legislature for the support of the entire State Department of Water Resources.

The number of stream gaging stations and their locations in the different drainage basins of the state are as follows:

North and South Platte River Basins.....	44
Arkansas River Basin.....	17
Rio Grande Basin.....	47
Colorado River Basin proper.....	47
Green River Basin.....	7
San Juan River Basin.....	23
Total stations	185

In 1936, a special cooperative investigation of the water resources of the Rio Grande basin in Colorado, New Mexico, and Texas above Fort Quitman, was initiated by the Water Resources Committee of the National Resources Committee, for the purpose of providing factual data from a disinterested agency for use in negotiating an interstate compact covering the waters of the Rio Grande. This study was continued through 1937 and is known as the Rio Grande Joint Investigation, which cost a total of about \$400,000, of which \$18,333 was contributed by each of the three states mentioned. Several Federal agencies cooperated in carrying out this investigation.

The studies on water supply were conducted by the U. S. Geological Survey. In this connection, a total of \$26,800 was allocated for stream gaging work, of which \$14,633 was contributed from state appropriations, \$7,000 by the U. S. Geological Survey, and \$5,167 by the Administrator of Public Works. Many of the then existing gaging stations were rebuilt and about twenty-three additional stations were established.

By using state appropriations, so far as possible, in the purchase of office equipment, water stage recorders, current meters, automobiles, supplies and equipment, the salvage value at the conclusion of the investigation was quite high. The allocation from state funds was expended as follows:

Automatic water stage recorders.....	\$ 4,180.80
Equipment and supplies (automobiles, office furniture, current meters and equipment) ..	2,488.69
Materials for construction of gaging stations, and hauling	3,656.26
Labor for construction of gages.....	1,681.00
Engineers' salaries.....	2,045.00
Miscellaneous	580.16
Total	\$14,633.00

In this connection, several new stream gaging stations were established on the headwaters of the Animas River near Silverton, for determination of water supplies available for transmountain diversion into the Rio Grande basin. The State of New Mexico had previously installed and operated several stations on the headwaters of the San Juan River, to determine

the amount of water available for transmountain diversion from the San Juan to the Rio Grande in New Mexico. All these stations were taken over by Colorado, and are now being maintained in cooperation with the U. S. Geological Survey.

With the advent of the CWA, FERA and WPA, much assistance in the way of labor and minor costs of materials, were obtained from these agencies for rehabilitation of old gaging stations and construction of new stations.

The major problem confronting this Department is that of obtaining sufficient appropriations to build, equip and maintain additional gaging stations, particularly on the headwaters of many of our state streams, where, due to lack of funds in the past, records of stream flow are deficient. This additional work is necessary to a proper determination of the water supplies available to new conservation projects, and also for proposed transmountain diversion projects. Present appropriations are fairly sufficient to carry on the work as presently constituted.

Recurring requests to this Department from various Federal agencies authorized to investigate, report upon, and construct water conservation and flood control projects in this state, have greatly increased the need for such data. Generally speaking, such agencies are not authorized to expend Federal funds for the acquirement of such information, except through cooperation with this Department whereby each agency absorbs one-half the cost of such work. Larger appropriations by the Legislature for the use of this office on hydrographic investigations are, therefore, considered most desirable.

Within the past biennium, the U. S. Bureau of Reclamation and the Denver Board of Water Commissioners have cooperated with this Department in establishing several new gaging stations on the Western Slope, while the Army Engineers have cooperated in the cost of maintaining stations on the Eastern Slope in connection with flood control studies.

So far, this Department has been able to carry on the extra field and office work which has resulted from the increased number of gaging stations. During 1935-1936, the payroll for gage readers alone increased by approximately \$800 as a result of new stations established. This increased cost for gage readers must come out of the State Engineer's Incidental and Gage Readers Fund, which reduces funds that otherwise would be available for the purchase of stream gaging equipment and supplies. Each new gaging station imposes a burden for operation, additional traveling expense, engineer's and gage reader's salaries, and supplies, in an amount of approximately \$200 per year. Such cost, however, does not include office work or supervision. At an average annual expense of \$200 per gaging station, it now costs approximately \$37,000 to maintain 180 gaging stations. Based upon a total expenditure of \$52,000 per year by this Department and the Geological Survey, there is available but

\$15,000 per year to cover the cost of all office work involved in the computation of field data, the preparation of the same for publication, purchase of supplies, et cetera.

As rapidly as possible, installations of adequate measuring and recording devices are being made on ditches and canals throughout the state. The cost of such installations, however, is borne by the ditch and canal owners. The necessary engineering services, required for the selection of the proper size and location of these measuring devices, are furnished by the regular hydrographers of this Department without cost to the ditch and canal owners. From past experience, it has been proven that proper installation and construction of measuring flumes result in more accurate measuring devices and, consequently, more reliable records of diversions and uses of water. In this connection, consultation and advice on some of the more important and difficult installations have been freely given by Mr. R. L. Parshall, Senior Engineer of the U. S. Bureau of Agricultural Engineering, who developed the Parshall measuring flume, now in universal use in canals and ditches throughout the state.

An important part of the duties of this Department is that of determining the amount of seepage and return waters entering our natural streams, primarily as a result of the practice of irrigation. Such determinations are made from time to time on all the main streams and principal tributaries of the state, but, due to lack of funds, the results of these studies have not been published since 1930. The return flow from the irrigated lands of the state, generally speaking, varies from about 3 to 6 cubic feet per second per mile of stream course. Such waters constitute a very substantial part of all the waters diverted for irrigation.

Transmountain diversions, or diversions of water from one stream basin into another basin, have been further increased within the past biennium by the addition of two large diversions. These are known as the Independence Pass Tunnel, 3.8 miles in length under the Continental Divide, which diverts water from the Roaring Fork, a tributary of the Colorado River, into the Upper Arkansas River basin, and also what is known as the Moffat Water Tunnel, about 6 miles in length, which diverts water from the head of the Colorado River into South Boulder Creek, a tributary of the South Platte River for use in the City of Denver. The Independence Pass Tunnel was completed in 1935 and diversions began on May 23rd, and in that year approximately 18,840 acre-feet of water were diverted to the Arkansas River basin. In 1936, a year of short water supplies, this tunnel diverted a total of 23,415 acre-feet. First diversions by the Moffat Water Tunnel occurred on June 10, 1936, during which year the total diversions amounted to 12,150 acre-feet.

There are now 23 transmountain diversions in this state, located as follows:

1. Diversions from Laramie River Basin into the South Platte River Basin.....	3
2. Diversions from the North Platte River Basin into the South Platte River Basin.....	2
3. Diversions from the Colorado River Basin into the South Platte River Basin.....	6
4. Diversions from the Colorado River Basin into the Arkansas River Basin.....	7
5. Diversions from the Colorado River Basin into the Rio Grande Basin.....	4
6. Diversions from the Rio Grande Basin into the Arkansas River Basin.....	1
Total	<u>23</u>

The measuring, checking and recording of the waters diverted and delivered by these several transmountain diversions has become an important part of the duties of this Department. Through the use of natural stream courses for transporting such transmountain diversions, and existing reservoirs for storing, either directly or through exchange, such diversions have required many additional measurements of stream flow and release of water from reservoirs and re-diversions by interested canals. This increased demand upon the Hydrographic Department, which will continue to grow with the completion of transmountain diversion projects, now contemplated or under construction, makes it imperative that additional funds for this Department be made available for extending the necessary hydrographic work, particularly during the period when such transmountain diversions are made.

Snow Surveys

A field of study closely related to the regular hydrographic work of the state, and which promises to become of great value to the water users, has recently been inaugurated. This work consists of a determination of probable runoff, due to snow melt, as a result of studies of the depths and water content of snow deposits throughout the headwaters of the principal streams of the state. This character of work has been carried on quite successfully in Utah and Nevada by state agencies, and has more recently been undertaken in practically all of the western states by the U. S. Bureau of Agricultural Engineering. This Department is now cooperating with that agency in maintaining some 72 snow courses throughout the state, from which observations on the depth and water content of the snow are made, usually on the first day of February, March, April and May. The results of these observations are published as soon as possible after the same have been made. Such data are later correlated with the records of stream flow resulting from these snow deposits.

Following a few years of such studies, it is anticipated that it will be possible to pre-determine from month to month the probable runoff resulting from snowfall on the headwaters of any of the principal streams of the state. Such information will be useful to the irrigation interests in a pre-determination of the amount of lands and character of crops they would be justified in planting, as determined by the water supply which may be available the following season.

In connection with these particular studies, new stream gaging stations have been installed, and others will be added as rapidly as funds permit.

CHAPTER V

INTERSTATE COMPACTS, NEGOTIATIONS

Rio Grande Compact

In its Fourth Annual Report, the Rio Grande Compact Committee recommended to the Governors of the States of Colorado, New Mexico and Texas, that the life of the temporary, interstate Compact, negotiated in 1929, be extended for a period of two years, or to June 1, 1937. In accordance with such recommendation, the Legislatures of the three states ratified such extension, which action was later approved by the Federal Congress.

Meetings of the Rio Grande Compact Committee, charged with the administration of the temporary Compact, have been held each year, at which time the data on stream flow collected by the Committee, have been exchanged between the three members of the Committee, and reports prepared and submitted to the Governors of the three states, all as required by the provisions of the Compact.

The Rio Grande Compact Commission, consisting of the Commissioner appointed by the Governor of each of the aforementioned states, has held five conferences within the biennium, all at Santa Fe, New Mexico.

The first conference covered the period January 28 to 31, 1935, at which time Colorado presented a plan, based upon a three-year study by this Department, for the equitable division of the waters of the Rio Grande, required by the Compact, which plan was predicated also on Colorado's need for additional regulation of waters which our water users have heretofore used in the San Luis Valley.

Another meeting of the Commission was held on December 2 to 4, 1935, inclusive, with representatives of the Water Resources Committee of the National Resources Committee, at which time a tentative agreement was entered into providing

for the present Rio Grande Joint Investigation, which tentative agreement was made final at a meeting on February 3, 1936.

Another conference of the Compact Commissioners, with representatives of the Rio Grande Joint Investigation, was held on April 30 to May 2, 1936, to consider progress reports of the various federal agencies. At this conference, projects for investigation, and a tentative allocation of funds for such investigations, were agreed upon.

On June 17 and 18, 1936, a two-day tour of inspection of the San Luis Valley was made by the representatives of the three states and the National Water Resources Committee, after which a public meeting was held at Monte Vista.

On March 3 and 4, 1937, the last meeting to date of the Rio Grande Compact Commission, with representatives of the Water Resources Committee, was held at Santa Fe, at which time the three Commissioners agreed to recommend to their respective Governors that the present Rio Grande Compact be extended another four months, or until October 1, 1937, to give the Commission opportunity to review the report of the Rio Grande Joint Investigation, which it was promised would be available by June 1, 1937, and for further negotiations looking to the signing of a permanent Compact between the states.

The Rio Grande Joint Investigation is being carried out by the Water Resources Committee of the National Resources Committee as a result of the President's Executive Order of September, 1935, directing that no further projects in the Rio Grande basin above Fort Quitman, Texas, be approved by any federal agency until the National Resources Committee had had an opportunity to report upon such projects.

The agreement entered into between the National Water Resources Committee and the Rio Grande Compact Commission, provides for a comprehensive investigation of the water and land resources of the Rio Grande basin, present uses of water therein, shortages, surpluses, quality-of-water determinations, regulation of water supplies through reservoir construction, gross and consumptive uses, character and extent of crops produced, drainage return, opportunity for supplementing the water supply of the basin from outside sources, etc. By agreement, the services of the Bureau of Agricultural Engineering, U. S. Bureau of Reclamation, U. S. Geological Survey, U. S. Bureau of Indian Affairs, Department of Soil Conservation, International Boundary Commission, and other federal agencies, were enlisted under the direction of the Water Resources Committee to assist in this investigation. For defraying the cost of this work, each of the three states agreed to contribute \$18,333, or a total of \$55,000, and the several federal agencies about \$210,000. To date, the Government's contribution has amounted to about \$260,000.

The field work of the investigation is now practically completed, and the results of the same, it is now anticipated, will be

available for the use of the Rio Grande Compact Commission by June 1st of this year. This is one of the most comprehensive and detailed investigations of this nature ever undertaken in the West, and it is believed will furnish the factual data from which a plan may be evolved for settling the long-standing dispute on the Rio Grande between the three states.

The plan tentatively contemplates the construction of storage reservoirs in the San Luis Valley of sufficient capacity to equalize stream flow to meet the seasonal needs of the water users of that Valley, transmountain diversions from the Colorado River basin for stabilizing demands, both in Colorado and New Mexico, and for meeting the growing danger of increased salinity of the waters of the lower part of the basin.

South Platte River Compact

The South Platte River Compact, between Colorado and Nebraska, was administered by this Department throughout the biennium without friction of any kind with our sister state.

La Plata River Compact

On July 3, 1933, the Supreme Court of Colorado, in the case of "The La Plata River and Cherry Creek Ditch Company v. Hinderlider, et al.", handed down a decision which reversed the District Court, in an action to restrain the water officials from rotating water under the Compact, which decision in substance held that the Compact is not a proper defense for the water officials when its administration interfered with the use of decreed water in Colorado. The ruling of the Supreme Court, however, did not become binding on this Department until the summer of 1936, and upon application by the Attorney General, two stays of execution were granted by the District Court, which carried the administration of the Compact through to the close of the irrigation period of 1936. In the meantime, the State of Colorado in its sovereign capacity, through its Attorney General, moved to intervene as a party in the original suit, which was denied by the District Court. A writ of error in the original suit has been perfected to the state Supreme Court of Colorado and briefs filed, and it is anticipated that oral argument will be had at an early date.

Negotiations for Compact on Republican and Arickaree Rivers

Negotiations have been conducted intermittently within the past three years between the Interstate Commissioners for Colorado and Nebraska, looking to a compact on these interstate streams.

Nebraska interests are desirous of developing an extensive irrigation project along the Republican River in that state, which would require the construction of storage reservoirs in Colorado, and the diversion of a portion of the waters of these

streams for use in Nebraska, which is now forbidden by the law of this state. The only way in which this may be accomplished is by interstate agreement. After considerable investigation and several conferences with the appropriators of water in our own state, we prepared and submitted a draft for a compact to the water users of our state, who approved the same, after which it was submitted to the Commissioner for Nebraska. Following numerous conferences, and exchange of re-drafts of the instrument, it now appears that fundamental differences exist between the two states which may render further negotiations futile.

CHAPTER VI

INTERSTATE LITIGATION

Laramie River Suit Between Wyoming and Colorado

The decision of the United States Supreme Court, in this second suit between Wyoming and Colorado over the waters of the Big Laramie River, was announced on June 1, 1936. The findings of the Court were in substantial accord with the position taken by Colorado in this suit, with one important exception, which relates to the use of water for the irrigation of about 4,250 acres of wild meadowlands along the Big Laramie River in Colorado.

Negotiations between the representatives of Colorado and Wyoming have been carried on since the decision was rendered, in an attempt to reach an understanding which would permit of the continued irrigation of these meadowlands without material injury to the irrigation interests in Wyoming. These negotiations have been carried on in the most friendly spirit, and it is hoped that this long-standing interstate controversy, dating from May, 1911, will be settled without serious injury to the interests in either state. In this connection, a joint trip of inspection of the measuring devices in Colorado was made by the water administrative officials and water users of the two states in June, 1936, as a result of which an agreement was reached between the State Engineers of the two states with respect to such devices and their operation.

Colorado River Conferences

Following the united protests of the representatives of the six states signatory to the Colorado River Compact, against a proposed contract between the Secretary of the Interior and the State of Arizona, providing for the delivery out of Boulder Canon Reservoir of as much as 2,800,000 acre feet of water per year for uses in Arizona, a conference of the Attorneys General and State Engineers of the compacting states, and the representatives of Arizona, met at Salt Lake City on February 25, 1936, and fol-

lowing a week of discussion, in which it was made plain to the representatives of Arizona that the contract as drawn was not acceptable, through invitation of Arizona, a new form of contract was prepared, which recognized the rights of the four upper basin states, as provided by the Colorado River Compact. The form of contract, as revised, proved unacceptable to the representatives of Arizona, as a result of which that state pressed for recognition of its claims before the Secretary of the Interior.

Following a joint hearing in Washington, the Secretary declined to enter into a contract with the State of Arizona for delivery of water out of Boulder Canon Reservoir. As a result, Arizona then sought relief in the Supreme Court of the United States, but failed in its objective. The legal advisers of Arizona then recommended to the Governor of that state that further action by Arizona in this connection was futile, and that in their opinion Arizona should ratify the Colorado River Compact, which it has as yet failed to do.

North Platte River Interstate Suit

Further negotiations between Colorado, Wyoming and Nebraska, looking to an interstate agreement on the North Platte River, which have been carried on for years, were terminated by Wyoming on December 4, 1933, and were not resumed until February, 1936, since which time two conferences between the representatives of the three states have been held, without tangible results.

On October 15, 1934, the State of Nebraska filed suit in the Supreme Court of the United States against the State of Wyoming, in which Nebraska asked the Court—

1. "To require that Wyoming, in the administration of waters of the North Platte River, should deny water to her direct flow water users having junior priorities when water is needed by senior Nebraska appropriators;
2. "To require that Wyoming prevent her appropriators for storage from taking water for such purposes when the water is needed by senior Nebraska appropriators;
3. "To prevent Wyoming from allocating to a new irrigation project, known as 'Casper-Alcova Project,' a 1904 priority, when as Nebraska claims, it is only entitled to a 1934 priority, and many Nebraska projects of priority of 1904 and later would be deprived of water in the administration of the stream with a 1904 priority for Casper-Alcova Project;
4. "As an incident to said direct relief, and in order to provide an exact basis for a decree covering the administration of the stream in the future, to fix and determine the respective priorities on the stream of Nebraska and Wyoming appropriators."

In its Demurrer and Motion to Dismiss, Wyoming, among other things, claimed that Colorado and the Secretary of the Interior are necessary parties to this action.

The State of Nebraska, in its Answer to Wyoming's Motion to Dismiss, asserts that, "since no relief is asked by complainant as against the State of Colorado, and since the State of Colorado has no interest in the relief asked, as against the State of Wyoming, or in the controversy between the State of Nebraska and the State of Wyoming, the State of Colorado is not a necessary or indispensable party."

The Court stated in principle that the Secretary of the Interior is not a necessary party to this action, since the States of Nebraska and Wyoming represent the interests of their respective water users, but did require that Colorado be made a party to the suit. On May 4, 1936, Colorado filed its Answer and an extensive Cross Bill, in which issue was taken with the claims of both Nebraska and Wyoming, and in which Colorado sets up its own claims to an equitable division of the resources of the North Platte River.

Following the appointment of a Master by the Court, testimony on behalf of Nebraska was given at length at two separate hearings in the summer and fall of 1936. In this connection, an extended trip of inspection by the Master and representatives of the three states was made over the North Platte and Platte River basins down to Grand Island, Nebraska, on August 6 to 13, 1936.

Arkansas River Interstate Suit and Negotiations

The taking of testimony in the second suit between Kansas and Colorado, over the waters of the Arkansas River, has been practically concluded, and it is presumed the evidence will be put in proper form and presented to the Supreme Court, and argument had some time in 1937; hence eight years will have elapsed since the filing of this suit by Colorado.

In the meantime, the officials of the two states have entered into a stipulation to maintain the present status quo as to the use of the waters of the river during the pendency of the suit, which stipulation, by agreement, may be made the basis of a division of the waters of the river, and the settlement of the Interstate controversy, and may be included in a consent decree.

The plan by which this may be accomplished, contemplates the construction by the United States Government of the Caddo Dam across the Arkansas River between Las Animas and Lamar. Preliminary surveys of this project, estimates of cost, and analysis of water supply, were made by this Department in 1930 and 1933. The results were adopted by the U. S. Army Engineers, and included in the 308 Report on Mississippi River Flood Control Projects, and more recently in the Omnibus Flood Control Act of 1936. Final plans, based upon a complete re-survey

of the reservoir basin, drilling of the dam site, and study of water supply and flood conditions, have not materially modified the former conclusions of this Department. The project contemplates a conservation reservoir of a capacity of 680,000 acre feet, of which 400,000 acre feet would be used for irrigation purposes, and 280,000 acre feet for flood control. Final plans are now being prepared by the U. S. Army Engineers for construction purposes, and it is confidently hoped that an allocation of funds for early commencement of construction will be authorized.

Under the provisions of the Act of Congress, authorizing this project, the local sponsors are required to furnish all necessary rights-of-way and easements, and agree to maintain the dam after completion without further cost to the Federal Government, and to hold the Government harmless against any claim arising as a result of such construction. The Legislature in 1935 created the Caddoa Reservoir and Arkansas River Basin Conservancy and Improvement District for this essential purpose.

The construction of the dam will require the moving of the present line of the Atchison, Topeka and Santa Fe Railroad out of the reservoir site, the relocation of a part of the present state highway, and the protection by a levee of the Fort Lyon Veteran's Hospital. The present Legislature of Kansas is expected to enact legislation which will permit the water users in western Kansas to join with those in Colorado in meeting the Government's requirements, and for financing their part of the cost to the irrigation interests.

Texas-New Mexico Interstate Suit

On November 25, 1935, the Supreme Court of the United States granted the request of the State of Texas, to file suit against the State of New Mexico and the Board of Directors of the Middle Rio Grande Conservancy District. The allegations set out in the Bill of Complaint by the State of Texas state among other things:

That the water supply of the Elephant Butte Reservoir has been depleted as a result of increased demands upon the flow of the Rio Grande by the recent development under the Middle Rio Grande Conservancy District, and the completion and storage of water in what is known as the El Vado Reservoir, constructed by that District on the Chama River, one of the principal tributaries of the Rio Grande—all to the great detriment of the water users under the Elephant Butte project in Texas and New Mexico.

The Bill of Complaint also alleges that the construction of the new works mentioned in New Mexico are in direct violation of the provisions of Article XII of the Rio Grande Compact, which states:

"New Mexico agrees with Texas, with the understanding that prior vested rights above and below Elephant Butte shall never be impaired hereby; that she will not cause or suffer the water supply of the Elephant Butte Reservoir to be impaired by new or increased diversion or storage within the limits of New Mexico, unless and until such depletion is offset by increase of drainage return."

Texas also complains that New Mexico is not maintaining a sufficient number of gaging stations along the Rio Grande and its tributaries, to obtain records of stream flow and diversions necessary to a proper protection of the interests under the Elephant Butte Reservoir and the State of Texas.

In New Mexico's reply, the Court was requested to require that Colorado be made a party to this suit, to which the Court did not accede.

Testimony in this interstate suit is now being taken before a Special Master appointed by the Supreme Court of the United States to hear the evidence.

CHAPTER VII

DAMS—NEW CONSTRUCTION

The following new dams were constructed during the past biennium:

Kenwood Dam, located on Cherry Creek about six miles above the City of Denver, designed for flood protection, was completed in January, 1936. This dam is an earth structure of a maximum height of about 50 feet and length of 4300 feet, and creates a reservoir of a capacity of 10,000 acre feet at spillway level.

Crystal Creek Dam, constructed by the City of Colorado Springs on Crystal Creek, which drains the north slope of Pikes Peak, was completed in the fall of 1935, a description of which may be found in the biennial report of the State Engineer for 1933-1934.

South Catamount Dam, constructed by the City of Colorado Springs, on South Catamount Creek near the Crystal Creek Dam, was started and practically finished in 1936. This dam is of the earthfill type, of a maximum height of 80 feet and total crest length of 1,131 feet, and will create a reservoir with a capacity of 3,935 acre feet. As in the case of the Crystal Creek Dam, this dam was very largely constructed of a mixture of disintegrated granite and soil, and the water face is protected against erosion and seepage by a covering of one-fourth inch copper bearing,

electrically welded steel plates, securely anchored into the earth embankment by means of double sets of anchors, and to a heavily reinforced concrete toe wall, extending into solid granite the entire length of the dam. As in the case of the Crystal Creek Dam, the formations beneath the cutoff wall are sealed by pressure grouting.

Robinson Lake Dam was constructed on a small tributary of Eagle River near Leadville, during the biennium, by the Climax Molybdenum Company of America, to furnish water for the large reduction works of that company at Fremont Pass. The dam is an earth structure of a maximum height of 67 feet, and maximum crest length of 1,460 feet. The upstream and downstream faces are respectively protected with hand-placed and loose granite riprap. The capacity of the reservoir is 2,524 acre feet. In connection with this reservoir, there was also constructed an extensive system of collecting ditches, pumping plant, and pipelines for delivering water to the Climax mill.

Hughes Dam, an earthfill structure, was constructed across Three Mile Creek, a tributary of Roaring Fork River near Glenwood Springs during 1936. This dam has a maximum height of 27 feet, crest length of 265 feet, and creates a reservoir with a capacity of 573 acre feet. The reservoir will be used for irrigation and recreational purposes.

Preliminary work on the construction of the **St. Charles Dam**, on the St. Charles River, was begun by the U. S. Forestry Department in 1936 for recreational purposes. This structure will consist of an earth embankment 87 feet in height, with a crest length of 760 feet. The capacity of the reservoir will be 760 acre feet.

Little Dry Creek Flood Control Dam, designed for the protection of the Town of Englewood, was started in the fall of 1934 as a CWA project and finally completed as an FERA and WPA project in the fall of 1936. This dam consists of an earth embankment of a maximum height of 50 feet, and crest length of 1,710 feet, which creates a storage capacity of 1,200 acre feet. A small amount of work yet remains to be done on the spillway.

Within the biennium, the Town of Fountain constructed as a WPA project **Keeton Lake Dam** across Little Fountain Creek, for domestic water supplies. This dam, a small earth structure, has a maximum height of 31 feet, crest length of 380 feet, which creates a reservoir with a capacity of 20 acre feet.

In connection with its **Roaring Fork-Arkansas River Transmountain Diversion**, the Twin Lakes Reservoir and Canal Company constructed during the biennium a rockfill storage and diversion dam across Lincoln Gulch, a tributary of Roaring Fork River. This dam has a maximum height of 52 feet, crest length of 782 feet, and is essentially for the regulation of diurnal fluctuations of stream flow, and diversions of water through Independence Pass Tunnel No. 1. The upstream face of the dam is covered with one-fourth inch copper bearing steel plates, elec-

trically welded in place and securely anchored to the face of the rockfill. A similar type of dam, with a concrete upstream face, was also constructed by this company across the upper course of Roaring Fork River, for the purpose of creating a small storage basin, and for diversion of water into Tunnel No. 2, for delivery into the aforementioned Lincoln Gulch Reservoir.

The construction of the large **Ralston Creek Dam**, located across Ralston Creek about 25 miles from Denver, was started in the late summer of 1936 by the Board of Water Commissioners of the City and County of Denver, and at the end of the past year the embankment of the dam had been carried up to substantially 35.0 feet above the floor of the valley; also the outlet tunnel through the south abutment had been completed. This dam, consisting of an earth structure with an impervious center core of substantially one-third the thickness of the dam, and faces of more pervious material, will have a maximum height above stream channel of about 185 feet when completed. The crest length will be 1,185 feet, and the dam will create a reservoir with a storage capacity of about 12,000 acre feet. This development is designed for the purpose of storing a portion of the water diverted from the Colorado River basin through the Moffat Tunnel and a system of conduits, extending from South Boulder Creek to Ralston Creek, which were substantially completed at the end of 1936.

Fruita Reservoir Dam No. 2, consisting of an earth structure 21.5 feet in height, 354 feet in length, and creating a capacity of 23 acre feet, was completed by the Town of Fruita in 1935 for domestic purposes.

Taylor Park Dam, located across Taylor River, a tributary of the Gunnison River, is now under construction by the U. S. Bureau of Reclamation, for creating a reservoir of some 106,000 acre feet capacity, to provide supplemental water supplies for the Uncompahgre Valley project in western Colorado. This structure, which is of the earth and rockfill type, will have a maximum height of 168 feet and crest length of 600 feet. It is anticipated that this dam will be completed in 1937.

The Vallecito Dam, to be located across Pine River at the junction with Vallecito Creek in southwestern Colorado, has been under investigation by the U. S. Department of Indian Affairs and the U. S. Bureau of Reclamation for the past year. It is anticipated that active construction on this dam will be under way during 1937. This dam, consisting of an earthfill structure, will have a maximum height of 122 feet, crest length of 4,280 feet, and will create a storage reservoir with a capacity of 129,600 acre feet. This dam will be the storage unit for the proposed Pine River Irrigation District, which is now being organized.

Within the biennium, federal relief forces constructed for the Town of Karvel a small earth dam, for recreational pur-

poses, the maximum height of which was 34 feet, crest length 792 feet, which creates a reservoir of a capacity of 85 acre feet.

The **Kincaid Dam**, a small, thin-arch, concrete structure, with a maximum height of 18 feet, and crest length of 21 feet, was constructed within the biennium across a small tributary of the Arkansas River in Water District No. 12.

DAM FAILURES

Within the biennium the Horse Creek Flood Control Dam, an earth structure across Horse Creek near the Town of Holly, which was constructed as a federal relief project, was destroyed on the night of August 28th, 1935, by a runoff resulting from unprecedented rainfalls over the drainage area above the reservoir. Although the destruction of this dam resulted in considerable loss of property below the same, fortunately no lives were lost. Following destruction of the dam, the State Engineer made an investigation throughout the drainage area and at the dam, and held a public hearing at Holly for the purpose of obtaining a record of the conditions which caused the failure of the dam, and nature of the losses incurred. From the testimony resulting from the hearing, it appears that the dam had the effect of temporarily impounding the unusual runoff above the reservoir, which prevented synchronization of this runoff with a runoff of like intensity which entered Horse Creek below the reservoir, and thereby reduced the loss which would otherwise have occurred. Plans are now being formulated looking to the reconstruction of this dam by federal agencies to an increased height of ten feet.

In the spring of 1935, a break in the Pleasant Valley earth dam, located a short distance above Longmont, occurred as the result of the burrowing of rodents beneath the foundation of the dam. The breach through the dam was closed the following day, after the loss of substantially 1,000 acre feet of water, and has since been completely restored. Other similar leaks have occurred in the dam, which have also been repaired.

Runoff of unprecedented proportions above the old Huerfano Dam, an off-channel storage reservoir, constructed many years ago, but never used, caused a failure of this earth dam, with no material resulting loss.

DAM REPAIRS

During the biennium, a drainage system was installed below the Sugar Loaf, or Turquoise Reservoir Dam, near Leadville, which apparently has corrected a serious seepage condition along the lower toe of that dam.

Plans were also approved for the raising and repair of the St. Charles No. 3 Dam, located just south of Pueblo.

The work of raising the earth embankment, which constitutes Monument Lake Dam, owned by the City of Trinidad, was completed by federal relief forces in 1936.

New valves were installed in the Julesburg Reservoir.

Raising and strengthening the Summit Reservoir, in southwestern Colorado, was started in the late summer of 1936.

Application was made to the Reconstruction Finance Corporation for a loan to rebuild the Ground Hog Reservoir, owned by the Montezuma Valley Irrigation District, and necessary engineering investigations completed, and it is anticipated that construction work on this dam may start in 1937.

The City of Golden made certain repairs to the concrete face of the Golden Reservoir, used for municipal purposes.

A drainage system, to remove a menace to the Lower Latham Reservoir Dam, together with other improvements designed to strengthen the dam, were completed in 1936.

Work progressed intermittently on the completion of the riprapping of the water face of the North Sterling Dam in Water District No. 64.

Repairs, in the form of re-facing, draining, and raising the small Blackmer domestic reservoir, including a new siphon spill-way over the same, were made in 1936.

CHAPTER VIII

RESERVOIR RE-SURVEYS

Within the biennium, re-surveys, topographic maps, and new capacity tables were made under the direction of this office for Clear Creek, Twin Lakes, Black Hollow, North Gray, South Gray, Gray No. 3, Claymore Lake Canal No. 1, Richard Lake, and Lindenmeier Reservoirs.

CHAPTER IX

SNOW SURVEYS

Under a cooperative agreement between the U. S. Bureau of Agricultural Engineering, U. S. Bureau of Reclamation, U. S. Geological Survey, and this Department, 58 snow courses were established throughout the mountainous region of the state, for the determination of depth and water-content of snow deposits, and the correlation of such information with stream flow, all designed for the purpose of predicting runoff from measured snow deposits. It is anticipated that, in future years, such predictions will be of material benefit to the water users in enabling them to more intelligently plan their crop plantings.

CHAPTER X

STATE IRRIGATION DISTRICT COMMISSION

But one application for the creation of an irrigation district was presented to the Irrigation District Commission within the biennium, this being an application for the organization of The Box Elder Valley Irrigation District, to include some 10,000 acres of land located in Box Elder Valley, about ten miles east of Denver. The water supplies for the District would be obtained from underground sources which had been rather elaborately tested by drillings, sampling of water-bearing materials, and through the operation of some sixteen pumping plants. Following an extensive study of the underground water-bearing materials, and all other available data affecting the sufficiency of the water supply for this District, and the cost of the proposed development and ability of the lands in question to repay costs of same, the Irrigation District Commission approved a proposed bond issue of \$147,000, and for 7,000 acres. The sponsors of this project proposed to finance the cost thereof through a federal loan and grant, but, due to the disproportionate cost of machinery and equipment, and that for labor, the application to the PWA was rejected, and no construction work has taken place.

Early in 1937, application was filed with the Board of County Commissioners of La Plata County, asking for the creation of the proposed Pine River Irrigation District in southwestern Colorado, which is designed to incorporate presently irrigated areas, and arable areas tributary to Pine River. The principal purpose of the District is to enable the water users to deal with the U. S. Bureau of Reclamation and the U. S. Department of Indian Affairs, in the financing of the cost of the project which is chargeable to the white settlers. Hearing on this petition has been set for May 18, 1937.

CHAPTER XI

HEARINGS BEFORE THE STATE ENGINEER

Within the biennium, and as a result of appeals to this Department by the Las Animas Consolidated Canal Company, involving the question of the right of that company to the use of seepage and return waters arising in that portion of the Arkansas River between the headgates of the Las Animas Consolidated Canal and the Fort Lyon Canal, and following a hearing before the State Engineer, a ruling was made against the latter company. The ruling of the State Engineer was sustained by the

District Court of Las Animas County, from which an appeal has been taken to the Supreme Court of the State.

A hearing before the office was also held to consider the complaint of the Bijou Irrigation District and Riverside Reservoir Company against diversions of water through the Burlington Ditch, a portion of which were later used for the irrigation of lands in the Henrylyn Irrigation District. The ruling of the office was that the water officials, under the conditions stated, had no authority to interfere with such diversions and uses so long as the water was not wastefully applied.

As a result of a ruling by the Division Engineer of Irrigation Division No. 3, upholding the right of the Trinchera Irrigation District to store water in the Mountain Home Reservoir throughout the year, the owners of the Trinchera Ranch Company appealed to the State Engineer, on which a hearing was held the latter part of 1936. The matter before the Department involved the interesting question of the authority of the water officials to question the authority of the District Court, limiting the right of a reservoir to store water therein to a certain period of time in any one year. The findings of the Department were that the water officials are obliged to recognize any limitations placed in a decree, which are not ambiguous, and especially so, after the lapse of many years following the rendition of the decree, during which time no effort has been made to have such reservations or limitations removed.

CHAPTER XII

COURT DECISIONS

Within the biennium, the Supreme Court handed down one of the most important decisions, affecting irrigation interests, ever reached in this state. The case in question, known as the "Park Reservoir v. M. C. Hinderlider, et al.", Feb. 3, 1936, involved the question of the right of a ditch with a decree junior in date of priority, to call for water when the same was being demanded for storage purposes by a reservoir having a senior date of appropriation. This Department had previously ruled in favor of the ditch owners, in harmony with the so-called reservoir statute enacted many years ago. The District Court sustained this ruling, which decision thereafter was appealed to the Supreme Court, which in turn upheld the ruling of the District Court. Upon rehearing, however, the Supreme Court reversed its former opinion and held that the water decrees of the state must be administered in order of priority, regardless of whether they are decrees for direct irrigation, or for storage purposes. As a result of this ruling, and a former decision of the Supreme Court, which limits the right of a reservoir to but one

filling a year, the Department was confronted with the necessity of establishing a date from which to reckon the year within which a reservoir might have opportunity to obtain one filling. November 1st was arbitrarily adopted as the date from which to reckon storage in reservoirs, which date seems to have met with universal approval.

CHAPTER XIII

LEGISLATION

The Thirtieth General Assembly enacted a law for the creation of Public Irrigation Districts, designed for the purpose of water conservation and uses. Such districts are without taxing powers, but are given authority to issue revenue bonds to defray the cost of such developments. This measure was patterned very largely after Senate File 310 of the State of Nebraska, but with the power features eliminated. The Act in question provides for the creation of a Commission to administer the law, which Commission consists of the Governor, State Engineer and Attorney General. Following the enactment of this law, applications were filed with the Commission for the creation of 14 public irrigation districts, of which 12 applications were finally approved by the Commission. As a result of such approval, applications to the Public Works Administration at Washington were made by the sponsors of the Districts for loans and grants with which to construct their irrigation works. Approval by the legal department of the PWA, of the sufficiency of such security, however, was not obtained until all available funds for use in Colorado had been allocated for other uses.

The Legislature also passed an Act for the control of artesian wells which are located above an altitude of 7,200 feet.

The Legislature also created the Caddoa Reservoir and Arkansas River Basin Conservancy and Improvement District, designed for the administration of the proposed Caddoa Reservoir, when constructed, and for the acquirement of rights-of-way, and for effecting compliance with regulations of federal agencies which might construct the dam. The District is given authority to issue only revenue bonds for the purpose of financing its requirements.

During this session, there was also created a new Water District, No. 46, in Irrigation Division No. 7, in southern Colorado. The new District is comprised of a small triangular area in which but few appropriations of water have been made, and which will be in process of adjudication within the near future.

The last Legislature also enacted certain Acts amendatory to the irrigation district laws of the state. These relate to the elec-

tion of Boards of Directors, the exclusion of lands, and the re-financing of outstanding obligations.

Certain minor amendments were also made to a former Act, which authorizes the State Engineer to employ deputies and assistants. The Legislature also passed an Act authorizing the State Engineer to employ consulting engineers and geologists to advise with him on questions of engineering and geology, in connection with the approval of plans and specifications for any dam in the state having a maximum height of fifty feet or more.

The last Legislature adopted an amendment to the Act, providing for the payment of fees for examination and approval of filings in the office of the State Engineer, which limits the fee for both the filing of statements of claim appropriating water, and for the examination of plans and specifications for dams, to \$100 each.

CHAPTER XIV

STATE PLANNING COMMISSION

In response to a request from the President of the United States in 1934, which was issued to the Governors of all the states, Governor Johnson of this state created, by Executive Order, a State Planning Commission of twelve members, and upon request of the Governor, the last Legislature created the State Planning Commission. The Commission is charged with the duty of formulating a Master Plan for the development and conservation of the natural resources of the state, for transportation and slum eradication, and with other similar duties. The Commission consists of twelve members, of which the State Engineer, the State Highway Engineer, and the Director of the Commission are ex-officio members. The Act also abolished the State Board of Immigration, and transferred the duties and personnel of that Board to the State Planning Commission. The State Planning Commission has been furnished a consultant by the National Resources Committee, who has supervised the collection and assimilation of a great mass of data, covering the natural resources of the State, and much other statistical data, essential to the proper functioning of the Commission.

CHAPTER XV

STATE WATER CONSERVATION PROGRAM

For the purpose of crystallizing the views of all parts of the state, and informing the state officials of local needs for water conservation, Governor Johnson called a public hearing in the House Chamber on June 3rd and 4th, 1935, at which time the State Engineer presented an outline of the water resources of the state, present and future demands upon the same, the need for supplemental water supplies, and for new uses, and a plan for meeting such needs through the construction of reservoirs and transmountain diversion tunnels and canals. Prior to the conference, the Governor had requested the representatives of all sections of the state to send to the State Planning Commission a list of projects which might be developed for water conservation in every section of the state. As a result of this invitation, some eighty projects were submitted by water users and state officials, for which the probable cost was estimated to be 100 million dollars. This list of projects included some 14 projects which were later approved by the State Board of Conservation. Following this public hearing, the State Planning Commission appointed a committee of seventeen to review the list of projects submitted, and to recommend those which appeared to be the most meritorious and necessary, and to tentatively fix the relative order of priority which these projects should have in the development of a statewide program for water conservation. The State Planning Commission finally recommended for immediate investigation and construction twenty-one projects. This list of projects was later revised, in the light of the possibility of securing federal assistance in financing the program, to sixteen projects. This program of construction was presented to the President by the Congressional delegation of our state, Governor Johnson and the State Engineer, on December 20, 1935. As a result, several of the major projects recommended for consideration and aid were ordered to be investigated by the U. S. Bureau of Reclamation and U. S. Army Engineers, since some of the projects requested were for flood control.

A number of the projects recommended by the State Planning Commission involved the construction of storage reservoirs in the San Luis Valley, which thereafter were included in the studies now being made by the Rio Grande Joint Investigation. Investigation of many of these storage projects, and one large transmountain diversion project, had previously been made by this Department. Investigations and studies by the federal agencies were carried on during 1936, and it is anticipated that the report upon the feasibility of the same, and estimates of cost for such developments, will be forthcoming early in 1937.

CHAPTER XVI

DISASTROUS FLOODS IN 1933-1934-1935

The phenomenal rainfall over, and runoff from, many of the drainage basins in the easterly part of Colorado in 1933, 1934 and 1935 raises the question as to what, if any, influences or effects the equally phenomenal meteorological conditions, which occurred during a portion of this period, had upon such rainfall and runoff. Some of the highest temperatures ever recorded in Colorado occurred in the summer of 1933. The great drouth occurred in 1934 and, following this drouth, there occurred the great dust storms in the spring of 1935, which were followed almost immediately by the phenomenal rainfalls and runoffs in question. It is the general belief that conditions which control air currents and precipitation are almost wholly the result of differences in temperature and barometric pressures. It is thought that the wind storms were probably no greater than those which have prevailed, in former years, but were impressed upon the minds of the people because of the great amount of dust which they carried. The latter condition is the result of the destruction of the grass and much of the vegetable cover of the Plains areas, caused by the preceding year's drouth, overgrazing and the plowing up of the native sod.

The impression generally prevails among irrigationists and residents of the Plains area, that the great dust storms in the spring of 1935 tended to seal the surface of the water courses and their drainage areas, thereby reducing their absorptive capacity, and hence increasing the rate and amount of runoff from such areas. Studies also disclosed that many of the drainage areas had become partially or thoroughly saturated prior to the great floods in question as a result of fairly continuous precipitation covering periods of from a few days to a month in time. This latter condition prevailed over the drainage basin of Kiowa and Bijou creeks.

It will be apparent that the phenomenal rates and volumes of runoff from many of the drainage areas in the Plains region of eastern Colorado in the summer of 1935 were the result of a combination of conditions particularly conducive to such high rates of runoff, these being: First, the destruction of much of the grass sod overlying the drainage basins by the great drought of 1934; second, the cementing of the porous surface soils as a result of the great dust storms; third, the intensity of rainfall over this area as a result of barometric conditions; fourth, in certain areas, the previous saturation of the drainage areas by copious and, in some instances, almost continuous precipitation. This combination may never occur again, or may occur again within a few years' time. But the probability of such recurrences, we take it, is rather remote. Under such a combination of conditions occurring over any drainage basin of an area of several hundred square miles or less, any attempt to control the runoff resulting from storms of such magnitude, through the construction of reservoirs, must of necessity invite grave hazards to such structures and to life and property.

downstream. In many areas in Colorado east of the Rocky Mountains a great need exists for flood-control projects. Many requests are made of the state engineer to investigate and report upon their feasibility. In many instances where such investigations or studies have been made by us the indications are that the construction of such projects would have the effect of creating a menace rather than providing a safeguard.

Purgatoire Flood—The flood of Sept. 15, 1934, on the Purgatoire River occurred over the middle section of its drainage basin. A satisfactory record of the rate of flow, the peak flow and the total runoff in acre-feet was obtained at the Nine Mile dam, from the automatic register chart. The total drainage area above Nine Mile dam amounts to 1,008 sq.mi., but this rain covered 635 sq.mi. only. The precipitation varied from 1 to 5 in. in depth and was of comparatively short duration, but the rainfall was so intense in certain parts of the area as to produce a runoff in the form of sheet water which destroyed sections of the highways and railroad.

The recorded peak flow over Nine Mile dam, which is a low concrete structure, was 64,200 sec.-ft. or 64 sec.-ft. per sq.mi. for the entire drainage basin above the dam, and 101 sec.-ft. per sq.mi. from the drainage area over which the rainfall occurred. The total runoff amounted to 22,800 acre-ft. or 36 acre-ft. per sq.mi. for the 635 sq.mi.

Horse Creek Flood—As is characteristic of the drainage area of the Purgatoire basin, the drainage area of Horse Creek is almost devoid of vegetation, except the natural prairie sod, a portion of which has been plowed up. The upper part of the drainage basin consists of gently sloping areas containing a number of dry lake beds which tend to retard runoff. The middle sections of the drainage area are more precipitous, while the lower section of the basin increases in slope and is traversed by numerous tortuous and fairly deep arroyos.

The flood of Aug. 28, 1935, resulted in the destruction of the Horse Creek flood-control reservoir dam, located some 9 or 10 miles above Holly. (See ENR, Sept. 5, 1935, p. 341.) This dam had just been completed by government relief forces. The dam had a maximum height of 40 ft., length of 2,400 ft., reservoir capacity at spillway elevation of 2,675 acre-ft., and 3,650 acre-ft. at crest of dam. A 225-ft. spillway around the westerly end had a depth varying from 5 to 7 ft. With the water at the top of the dam, the spillway had an estimated capacity of 16,000 sec.-ft.

A fairly reliable record of the volume and rate of runoff from the drainage area above the dam was made possible from a knowledge of the time intervals at which the water rose in the reservoir and from the capacity of the reservoir and spillway. From such information and also from cross section and slope levels taken on the channel of the creek above the reservoir, it is concluded that

the peak flow resulting from this flood amounted to 22,000 sec.-ft., or 142 sec.-ft. per sq.mi. for the total drainage area of 155 sq.mi.

Investigation disclosed that the rainfall on the night of Aug. 27 and 28 ranged from $2\frac{1}{2}$ to $11\frac{1}{2}$ in. The rainfall covered a period of 2 to 4 hr. The area over which the rainfall occurred was about 100 sq.m. The peak flow would therefore, amount to 220 sec.-ft. per sq.m. The area over which the rainfall of greatest intensity occurred, approximated 50 sq.mi., which would show a peak runoff of 440 sec.-ft. per sq.m. The total runoff of the area over which the rainfall occurred would approximate 100 acre-ft. per square mile.

Granada Flood—The 2 to 9-in. rain storm which caused the Granada Creek flood commenced about 7 p.m. July 11, 1935, and reached its greatest intensity about 8:15 p.m., and ended about 3 a.m. July 12. The precipitation over the basin ranged from 2 to 8 in. The determination of runoff was made by the usual slope and cross-section method. This flood is the greatest of which there is any record in this basin and resulted in the loss of eight lives and great losses to livestock and other property.

Colorado Springs Flood—The flood at Colorado Springs on the Monument Creek, a tributary of the Fountain River, originated 2 mi. northwest of Colorado Springs about 10:30 a.m., May 30, 1935, and lasted from 2 to $2\frac{1}{2}$ hr. The creek reached flood stage about 12:30 p.m., crest elevation about 2 p.m., and had receded somewhat by 3:30 p.m. The peak discharge, as determined by F. O. Ray, city engineer of Colorado Springs, was 50,000 sec.-ft. This flood on Monument Creek is the greatest of which there is any record, and created damages to property in Colorado Springs estimated at \$750,000 and the loss of three lives.

Cherry Creek Flood—The drainage area of Cherry Creek above Castlewood dam consists of 175 sq.mi. of rather pronounced topography, intersected by several deep and well-defined water courses culminating immediately above the Castlewood reservoir. The upper rim of the drainage basin is heavily timbered with pine and other similar growths, while the lower part of the basin above the dam consists of grass covered and cultivated areas. Following the failure of the dam about midnight of Aug. 2-3, 1933, investigations made by the state engineer indicated that the intensity of the rainfall ranged from nothing to $7\frac{1}{2}$ or 8 in. in depth. The rainfall originated in the upper reaches of the drainage basin in the late afternoon or evening, causing the peak flow in question at the reservoir about midnight. The peak flow measured by means of cross sections and slope showed a discharge of 31,960 sec.-ft. The flood resulted in an estimated total runoff at Castlewood reservoir of 2,620 acre-ft.

Hydrographic data of heavy floods in Eastern Colorado During the last three years.

Location	Watershed Cov- ered by Rain			Area of Most Intense Rain			Est. Total Runoff Acre- Ft.	Data Collected by	
	Peak Q Sec.- Ft.	Peak Q Sec.- Ft.	Run- off Acre Ft.	Area Sq. Mi.	Peak Q Sec.- Ft.	Run- off Acre Ft.			
Monument Creek-----	*50,000	130	385	77	108	463	93	10,000	
Wolf Creek—above Granada-----	14,000	75	187	39	25	560	116	2,900	
Granada Creek—above Granada-----	31,000	40	775	160	35	886	183	6,400	
Castlewood Dam-----	32,000	131	244	20	-----	-----	-----	2,620	
Kenwood Dam (Prelim. Design)-----	45,000	375	120	-----	-----	-----	-----	F. C. Carstarphen	
Kenwood Dam (Final Design)-----	70,000	375	187	68	-----	-----	-----	M. C. Hinderlider	
Kiowa Creek, 12 mi. north of Kiowa-----	110,000	190	578	591	120	917	987	J. E. Whitten & Frances Hart	
Kiowa Creek at Bennett-----	75,300	266	284	-----	-----	-----	75,300	Whitten & Hart	
Kiowa Creek at Elbert-----	43,500	60	725	-----	-----	-----	-----	R. J. Tipton	
W. Bijou Creek—Johnson's Brdg.-----	34,250	118	291	462	108	317	505	Whitten & Hart	
W. Bijou Creek—18 mi. S. Stras- burg-----	44,400	187	238	-----	172	258	-----	Whitten & Hart	
Middle Bijou Creek at Peoria-----	143,640	230	623	-----	-----	-----	-----	Whitten & Hart	
Middle Bijou Creek below mouth of Wilson Ck.-----	71,270	151	473	-----	146	488	-----	Whitten & Hart	
West Bijou Creek at Byers-----	164,670	280	588	-----	-----	-----	-----	Whitten & Hart	
East Bijou Creek at Deer Trail-----	25,000	294	85	-----	38	651	-----	Whitten & Hart	
Bijou Creek at mouth, above Bijou canal crossing-----	282,900	1,444	196	81	387	731	302	116,800	Whitten & Hart

*Computed by F. O. Ray, city engineer, Colorado Springs.

When the flood entered the reservoir, there was already stored therein 2,272 acre-ft. The flood quickly filled the reservoir and overtopped the dam the entire 600-ft. length to a depth of $1\frac{1}{3}$ ft. The spillway over the center of the dam had a depth of 4 ft. and a length of 100 ft. The flood was limited almost entirely to the area above the dam. This flood, together with the failure of the dam, created a peak flow at the present Kenwood dam, some 25 miles below Castlewood dam, estimated to have been 34,000 sec.-ft.

Assuming that the area covered by the rainfall covered three-fourths of the basin above Castlewood dam the peak runoff per sq.mi. would amount to 244 sec.-ft. and 20 acre-ft. per sq.mi., or 180 sec.-ft. per sq.mi. for the total drainage area above Castlewood Dam, and but 15 acre-ft. per sq.mi. for the same area.

Following his field studies of runoff from smaller drainage areas within the Cherry Creek drainage basin above Denver, ranging from about 15 to 24 sq.mi., Dan McQuaid reached the conclusion that peak flows from these smaller areas amounted to as much as from 366 to 734 sec.-ft. per sq.mi.

Arikaree and South Fork Floods—The heavy rain storms originating in the Colorado Springs area, traveling north and eastward along the northern edge of the divide between the Arkansas and South Platte drainage basins caused excessive floods in the basins of the Arikaree River and South Fork of the Republican River. Rainfall data over these watersheds was collected by Robert Follansbee, district engineer of the U. S. G. S. and by L. T. Burgess.

A 2-hr. rainfall of 9 in. was reported to have occurred near Seibert during the late afternoon of May 30. Near Idalia, on the South Fork of the Republican, more than 24 in. of rain, measured in a stock tank, fell from 6 p.m. to shortly after midnight. Rainfall from 8 to 14 in. was measured and recorded at many points in the two drainage areas.

During and after these excessive rains, both the Arickaree and Republican rivers overflowed their banks and sent enormous volumes of water down these streams. At the height of the flood, skies over the eastern counties were a dark brown due to a most unusual situation. Along the Colorado-Kansas border there was a heavy dust storm. Clouds of dust could be seen for miles and the coppery-hued sky cast a brown shadow, giving the scene a weird appearance.

From the rainfall data collected the drainage area covered by the storm has been outlined. The maximum discharge has been computed by cross-section and slope measurements, which were made by the engineers of the U. S. G. S. On the South Fork of the Republican a cross section was taken south of Idalia near Newton, Colo., 10 miles east of the Colorado-Kansas line. The total drainage area above the section covers 1,270 sq.mi. The total maximum discharge was computed at 103,000 sec.-ft. The runoff per square mile from this area is 81 sec.-ft. At Benkleman, Neb., the maximum discharge computed totals 150,000 sec.-ft. from 2,580 sq.mi., which shows a runoff of 58 sec.-ft. per sq.mi.

In the area of 669 sq.mi., drained by the South Fork, a section of intense precipitation was segregated between Newton and north of Seibert. A computed discharge of 83,000 sec.-ft. gives a runoff of 124 sec.-ft. per sq.mi. This is the largest unit runoff computed for the South Fork drainage.

Along the Arickaree River, several miles north, was found excessive rainfall, with attendant extreme floods. At Cope, Colo., the flood waters descended in two separate peaks. The maximum computed at Cope was 25,000 sec.-ft. from a drainage area of 690 sq.mi. Nine miles north of Idalia, Colo., a slope measurement was made on the Arickaree River. The maximum discharge was computed to be 54,000 sec.-ft. From a drainage area of 1,260 sq.mi. the unit runoff was 43 sec.-ft. per sq.mi.

All old-time settlers claim these floods to be the largest of the last 60 years. Several red cedar roots and stumps were uncovered and several skulls larger than those of cattle or buffalo were also washed up. No red cedar trees now exist in the Arickaree drainage basin and no record of any having grown there was obtainable.

Bijou and Kiowa Floods—The flood-flows of May 30, 1935, over the drainage area of Bijou and Kiowa creeks and over the head waters of the Arickaree and South Fork of the Republican appear to have been the greatest by far, of which there is any record or

legend. Following these floods assistants of the state engineer's office made several investigations, resulting in the following tentative conclusions, which appear incredible in certain instances (see table). The peak flows in second-feet were ascertained by the usual method of cross-sections and slope levels taken at different points in the several drainage basins. Reliable information could not be obtained relative to the probable runoff in acre-feet, for lack of authentic information concerning the exact period of time covered by the floods in question.

The information obtained of the flood on West Bijou Creek at Johnson's bridge justifies, in a measure, the assumption shown by the accompanying graph which has two peaks, different in shape and form from the graphs of the Purgatoire, Horse Creek and Cherry Creek floods. The graph of the flood at the Johnson bridge shows a peak discharge of 34,250 sec.-ft. and a total probable runoff of 54,500 acre-ft. from a drainage area of 118 sq.mi., or 462 acre-ft. per sq.mi. At the mouth of Bijou Creek on May 31, 1935, the graph shows a peak flow of 282,900 sec.-ft. from a total drainage area of 1,444 sq.mi., or 196 sec.-ft. per sq.mi. The approximate area over which the most intense precipitation occurred appeared to be 387 sq.mi. which would show a peak discharge of 731 sec.-ft. per square mile. Based upon a total runoff of 116,800 acre-ft., the runoff from the entire basin was 81 acre-ft. per sq.mi., and from the area covered by the most intense precipitation, 302 acre-ft. per sq.mi. While some of the results, particularly those of the Bijou Creek discharge, appear to be incredible and entirely beyond anything which has ever occurred in Colorado or adjacent areas, they are submitted for whatever value they may have.

The valleys of the streams herein mentioned were completely ravaged by the floods. The floods in the South Fork of the Republican and Arickaree rivers, destroyed either partially or in whole, 60 miles of railroad, many railroad and highway bridges, together with private and corporate property. The floods in Kiowa and Bijou creeks caused losses of hundreds of thousands of dollars to farming interests, highways, railroads and individuals. Two large flumes which carry the Bijou and Fort Morgan canals across Bijou Creek were destroyed and had to be rebuilt at a cost of \$150,000. The Bijou ditch flume was replaced by a large inverted steel siphon. These facts are mentioned as indicative of the magnitude of the floods and tend to substantiate the tentative conclusions presented.

It is with great reluctance that the data with respect to the runoff in acre-feet is submitted, since the period covered by some of the floods could not be definitely ascertained. It is believed, however, that the determinations of the peak discharges of the streams are within reasonable limits of accuracy.

The account of these floods with additional data will be found in the August 13, 1936, issue of *Engineering News-Record*.

CHAPTER XVII

**DESCRIPTIONS OF
STREAM GAGING STATIONS
AND
TABLES OF STREAM DISCHARGE**

All stream gaging stations in this state are maintained by the State Engineer of Colorado in cooperation with the United States Geological Survey.

The majority of the stream measurements in the Colorado River and North Platte River basins were made by the U. S. G. S. while all work in the Arkansas, Rio Grande and South Platte River basins was done by the State Engineer's office.

The following agencies also cooperated with the State Engineer in this work:

State of Nebraska

State of New Mexico

U. S. Bureau of Reclamation

U. S. Forest Service

Municipalities of Denver, Loveland, Grand Junction

Arkansas Valley Ditch Association

Rio Grande Water Users Association

Uncompahgre Valley Water Users Association

Del Norte, Terrace and Trinchera Irrigation Districts

Costilla Estates Development Company

Public Service Company of Colorado

Western Colorado Power Company

RELATED RUNOFF IN PERCENTAGE OF THE NORMAL
FOR STREAMS IN COLORADO

Stream	Years of Record	Mean Ac. Ft.	1935 %	1936 %
Animas River at Durango.....	38	661,400	85	79
Arkansas River at Canon City.....	49	532,520	84	109
Bear Creek at Morrison.....	17	43,020	67	106 *
Big Thompson River below Power House near Drake	8	111,990	122	139
Blue River at Dillon.....	26	90,320	72	120
Boulder Creek near Orodell.....	30	69,940	89	113 *
Cache la Poudre River at Canon.....	53	310,850	92	95 *
Clear Creek near Golden.....	27	179,560	94	120 *
Colorado River at Glenwood Springs.....	37	2,208,400	73	103
Conejos River near Mogote.....	34	274,870	107	81
Dolores River at Dolores.....	27	321,560	95	90
†Fraser River at West Portal.....	26	32,128	82	102
La Plata River at Hesperus.....	22	35,565	111	91
Laramie River near Jelm, Wyoming.....	28	127,500	80	78
Little Snake River at Lily Park.....	16	479,320	47	74
North Platte River near Northgate.....	23	375,830	53	88
Purgatoire River at Trinidad.....	29	67,530	78	51
Rio Grande River near Del Norte.....	47	702,280	96	68
†Roaring Fork River at Glenwood Springs..	30	1,124,800	81	95
Saguache Creek near Saguache.....	27	57,460	75	58
South Boulder Creek at Eldorado Springs...	44	55,740	88	102 *
*South Platte River at South Platte.....	45	272,000	63	101 *
St. Vrain Creek at Lyons.....	47	100,010	90	107 *
White River near Meeker.....	33	471,410	77	89
White River near Watson, Utah.....	15	577,100	69	82
Yampa River at Steamboat Springs.....	31	360,950	70	106
Yampa River near Maybell.....	26	1,232,600	71	93
State Average			82	94

†Corrected for trans-mountain diversion.

*Corrected for storage.

NOTE—The mean in acre feet is based on all available years of record as shown in first column, including the year 1936.

PLATTE RIVER DRAINAGE

SOUTH PLATTE RIVER NEAR LAKE GEORGE, COLORADO

Location—Water stage recorder in NW $\frac{1}{4}$ Sec. 21, T. 13 S., R. 72 W., 1½ miles below Eleven Mile Canon Reservoir and 8 miles above Lake George.

Drainage Area—929 square miles. Zero of gage is 8423.95 feet above mean sea level.

Records Available—October 1, 1929, to September 30, 1936. (Station located at Lake George, 8 miles downstream from October, 1910, to September, 1929.)

Maximum discharge observed during period 1930-36; 990 second feet, August 15, 1930. Gage height 4.80 feet.

Maximum Discharge—Year 1935; 598 second feet, July 23, 1935.

Maximum Discharge—Year 1936; 744 second feet, August 6, 1936. Gage height 4.07 feet.

Accuracy—Records considered excellent.

Diversions for storage and irrigation above station. Flow regulated by Antero and Eleven Mile Canon Reservoirs; capacity 33,000 and 80,000 acre-feet, respectively.

SOUTH PLATTE RIVER ABOVE LAKE CHEESMAN, COLORADO

Location—Water stage recorder in Sec. 22, T. 10 S., R. 71 W., at weir ½ mile above highwater line of Lake Cheesman.

Drainage Area—1680 square miles. Zero of gage is 6845.86 feet above mean sea level.

Records Available—October 1, 1924, to September 30, 1936.

Maximum discharge observed during period 1924-36; 3030 second feet, August 6, 1936. Gage height 5.30 feet.

Maximum Discharge—Year 1935; 1100 second feet, August 1, 1935. Gage height 3.61 feet.

Maximum Discharge—Year 1936; 3030 second feet, August 6, 1936. Gage height 5.30 feet.

Accuracy—Records considered excellent except those for August 1-24, September 1, 30, and those estimated November 25-30, 1934; June 12, 13, June 22 to July 6, August 26-31, 1935, on basis of reservoir storage. Records estimated, October 24-21, 1935, and April 1-8, 1936, are fair.

Diversions for storage and irrigation above station. Flow regulated by two reservoirs above station; total capacity of 115,000 acre-feet.

SOUTH PLATTE RIVER BELOW LAKE CHEESMAN, COLORADO

Location—Water stage recorder in Sec. 6, T. 10 S., R. 20 W., $\frac{1}{4}$ mile below Lake Cheesman.

Drainage Area—1766 square miles. Zero of gage is 6610.38 feet above mean sea level.

Records Available—October 1, 1924, to September 30, 1936. Acre-foot estimates 1909 to date.

Maximum discharge observed during period 1924-36; 1630 second feet, June 25, 1936. Gage height 6.40 feet.

Maximum Discharge—Year 1935; 1430 second feet July 23, 1935. Gage height 6.38 feet.

Maximum Discharge—Year 1936; 1630 second feet June 25, 1936. Gage height 6.40 feet.

Accuracy—Records considered good except for December 10, 1934, to March 23, 1935, which were estimated on basis of four discharge measurements and discharge records at reservoir, and for December 11, 1935, to March 20, 1936, computed on basis of two discharge measurements and discharge records of reservoir, and those for September 21-25, which are fair.

Diversions for storage and irrigation above station. Flow regulated by three reservoirs, total capacity 194,000 acre-feet.

NORTH FORK OF SOUTH PLATTE RIVER AT SOUTH PLATTE, COLORADO

Location—Water stage recorder in Sec. 25, T. 7 S., R. 70 W., one-third of a mile above South Platte.

Drainage Area—484 square miles. Zero of gage is 6,090.55 feet above mean sea level.

Records Available—January 4, 1909, to September 30, 1910; April 1, 1913, to September 30, 1936.

Maximum discharge observed during period 1909-1936; 1,910 second feet, June 8, 1921. Gage height 5.9 feet.

Maximum Discharge—Year 1935; 833 second feet, June 13, 1935. Gage height 4.47 feet.

Maximum Discharge—Year 1936; 1,620 second feet, August 12, 1936. Gage height 5.76 feet.

Accuracy—Records considered good except those for November 27 to March 21, 1935, which were estimated on basis of four discharge measurements and temperature records and for period of ice effect, December 1 to March 20, 1936, which were computed on above basis and are fair.

Diversions for Irrigation above station.

SOUTH PLATTE RIVER AT SOUTH PLATTE, COLORADO

Location—Water stage recorder in Sec. 25, T. 7 S., R. 70 W., at South Platte, 375 feet below mouth of North Fork of South Platte River.

Drainage Area—2.550 square miles. Zero of gage is 6,078.46 feet above mean sea level.

Records Available—March 28, 1902, to September 30, 1936.

Maximum discharge observed during period 1902-36; 6,320 second feet June 7, 1921. Gage height 8.95 feet.

Maximum Discharge—Year 1935; 1,630 second feet, July 23, 1935. Gage height 4.62 feet.

Maximum Discharge—Year 1936; 2,100 second feet, June 25, 1936. Gage height 4.77 feet.

Accuracy—Records considered good. Discharge November 28 to March 21, 1935, estimated on basis of four discharge measurements, flow of South Platte at Waterton and diversions at Intake. Records for October 1-4, 8-11, 1935; December 1 to March 20; April 1-12, 1936; computed on the basis of four discharge measurements and records for station below Lake Cheesman, plus estimated inflow.

Diversions for irrigation above station. Flow regulated by three reservoirs, capacity 194,000 acre-feet.

SOUTH PLATTE RIVER AT WATERTON, COLORADO

Location—Water stage recorder in Sec. 34, T. 6 S., R. 69 W., 200 feet east of highway bridge at pipe line crossing from Platte Canon Reservoir to filter beds and one-half mile south of Waterton.

Nearest Tributary—Waste from Platte Canon Reservoir enters immediately above station.

Drainage Area—2,621 square miles. Zero of gage is 5,484.44 feet above mean sea level.

Records Available—May 1, 1926, to September 30, 1936.

Maximum discharge observed during period 1926-36; 2,670 second feet, August 12, 1936. Gage height 3.10 feet.

Maximum Discharge—Year 1935; 1,280 second feet, July 23, 1935. Gage height 2.28 feet.

Maximum Discharge—Year 1936; 2,670 second feet, August 12, 1936. Gage height 3.10 feet.

Accuracy—Records considered good. Discharge estimated January 16 to February 6, 1935.

Diversions for irrigation above station. Flow regulated by three storage reservoirs above station; capacity 194,000 acre-feet.

SOUTH PLATTE RIVER AT DENVER, COLORADO

Location—Water stage recorder at 19th Street Bridge in Denver, $\frac{1}{4}$ mile below mouth of Cherry Creek. Waste water from Farmers and Gardners Ditch enters river above station.

Drainage Area—3,840 square miles. Zero of gage is 5,162.16 feet above mean sea level.

Records Available—May 7, 1895, to September 30, 1936. Station maintained between 15th and 16th Street Bridges prior to August 29, 1931. Record comparable.

Maximum discharge observed during period 1902-36; 22,000 second feet, September 10, 1933. Gage height 10.98.

Maximum Discharge—Year 1935; 12,300 second-feet May 31, 1935. Gage height 8.10.

Maximum Discharge—Year 1936; 4,020 second-feet, August 12, 1936. Gage height 4.79.

Accuracy—Records considered good except those estimated June 1, 3-6, 9, 16, 1935, and February 1-20, March 5-8, 15-25, 1936, which were based on weather records and are fair.

Diversions for irrigation above station.

SOUTH PLATTE RIVER AT HENDERSON, COLORADO

Location—Water stage recorder in Sec. 34, T. 1 S., R. 67 W., $\frac{1}{4}$ mile west of Henderson and just below highway bridge.

Drainage Area—4,740 square miles. Altitude, 5,000 feet above mean sea level.

Records Available—May 1, 1926, to September 30, 1936.

Maximum discharge observed during period 1926-36; 5,600 second-feet, September 10, 1933. Gage height 7.15 feet.

Maximum Discharge—Year 1935; 5,150 second-feet June 12, 1935. Gage height 6.22 feet.

Maximum Discharge—Year 1936; 4,630 second-feet August 3, 1936. Gage height 5.94 feet.

Accuracy—Records considered good except those for February 1 to March 4, 1936, which were based on records for station at Fort Lupton, and are fair.

Diversions for irrigation above station.

SOUTH PLATTE RIVER AT FORT LUPTON, COLORADO

Location—Water stage recorder in Sec. 6, T. 1 N., R. 66 W., at west edge of Fort Lupton and 600 feet above highway bridge. Prior to June 20, 1935, water stage recorder a quarter of a mile downstream at different datum.

Drainage Area—5,070 square miles. Altitude, 4,900 feet above mean sea level.

Records Available—May 10 to September 15, 1906; April 29, 1929, to September 30, 1936.

Maximum discharge observed during period 1906, 1929-36; 4,150 second-feet, September 11, 1933. Gage height 5.80 feet.

Maximum Discharge—Year 1935, not determined.

Maximum Discharge—Year 1936; 2,200 second-feet August 5, 1936. Gage height 5.39 feet.

Accuracy—Records considered good except for estimated periods from October 28 to November 2, 1934, January 16 to February 10, March 3 to April 3, May 20 to June 5, June 16-20, 1935; estimated by comparison with South Platte at Henderson and for period February 3-16, 1936, which are fair.

Diversions for irrigation above station.

SOUTH PLATTE RIVER NEAR KERSEY, COLORADO

Location—Water stage recorder in Sec. 9, T. 5 N., R. 64 W., at highway bridge 1 $\frac{3}{4}$ miles north of Kersey. Cache La Poudre River enters 2.5 miles above station.

Drainage Area—9,500 square miles. Altitude, 4,600 feet above mean sea level.

Records Available—April 27, 1901, to October 31, 1903; March 1, 1905, to November 20, 1912; January 1, 1914, to September 30, 1936.

Maximum discharge observed during period 1901-3, 1905-36; 31,000 second-feet, June 7, 1921.

Maximum Discharge—Year 1935; 13,000 second-feet May 31, 1935. Gage height 7.29 feet.

Maximum Discharge—Year 1936; 2,200 second-feet August 5, 1936. Gage height 5.39 feet.

Accuracy—Records considered good except those for period of ice effect from February 3-16, 1936, which were estimated, and are fair.

Diversions for irrigation above station.

SOUTH PLATTE RIVER AT SUBLLETTE, COLORADO

Location—Water stage recorder in Sec. 14, T. 4 N., R. 61 W., just below highway bridge 1,000 feet south of Sublette.

Drainage Area—12,900 square miles.

Records Available—April 19, 1926, to September 30, 1936.

Maximum discharge observed during period 1926-36; 8,090 second-feet, April 23, 1926. Gage height 5.80 feet. Highest discharge known about 30,000 second-feet June 7, 1921.

Maximum Discharge—Year 1935; 4,720 second-feet June 1, 1935. Gage height 6.45 feet.

Maximum Discharge—Year 1936; 1,300 second-feet June 6, 1936. Gage height 3.56 feet.

Accuracy—Records considered good.

Diversions for storage and irrigation above station.

SOUTH PLATTE RIVER AT BALZAC, COLORADO

Location—Water stage recorder in Sec. 13, T. 5 N., R. 55 W., at Balzac siding $\frac{1}{4}$ miles northeast of Union.

Drainage Area—17,700 square miles. Altitude, 4,090 feet above mean sea level.

Records Available—January, 1917, to September 30, 1936.

Maximum discharge observed during period 1917-36; discharge not determined, May 31, 1935. Gage height 11.43 feet.

Maximum Discharge—Year 1935; discharge not determined May 31, 1935. Gage height 11.43 feet.

Maximum Discharge—Year 1936; 4,950 second-feet August 5, 1936. Gage height 5.25 feet.

Accuracy—Records considered good below 500 second-feet, fair above. May 24 to June 20, 1935, estimated and discharge October 1-17 based on flow at temporary station near Messex, one mile below; estimated February 3-20, 1936, on the basis of weather records.

Diversions for storage and irrigation above station.

SOUTH PLATTE RIVER AT JULESBURG, COLORADO

Location—Water stage recorder in Sec. 33, T. 12 N., R. 44 W., at highway bridge one-half mile east of Julesburg, Colorado, and four miles above the Colorado-Nebraska State Line. (Three water stage recorders.) Lodgepole Creek enters from north approximately eight miles west.

Drainage Area—20,600 square miles. Altitude, 3,469 feet above mean sea level.

Records Available—April 2, 1902, to November 16, 1906; May 12, 1908, to November 30, 1912; April 8, 1914, to September 30, 1936.

Maximum discharge observed during period 1902-6, 1908-12, 1914-36; 31,300 second-feet, June 2, 1935.

Maximum Discharge—Year 1935; 31,300 second-feet June 2, 1935.

Maximum Discharge—Year 1936; 480 second-feet February 29, 1936.

Accuracy—Records considered good. They represent total flow passing the Colorado-Nebraska State Line.

Diversions for irrigation above station.

TARRYALL CREEK NEAR LAKE GEORGE, COLORADO

Location—Water stage recorder in Sec. 22, T. 11 S., R. 72 W., at McLaughlin's ranch eight miles northwest of Lake George, and approximately five miles above the mouth. Cowhead Creek enters from south approximately one mile above.

Drainage Area—460 square miles.

Records Available—October, 1910, to June, 1912; June 19 to October 26, 1916; April 1, 1925, to September 30, 1936.

Maximum discharge observed during period 1910-12, 1916, 1925-36; 643 second-feet, July 31, 1935. Gage height 5.20 feet.

Maximum Discharge—Year 1935; 643 second-feet July 31, 1935. Gage height 5.20 feet.

Maximum Discharge—Year 1936; 640 second-feet August 1, 1936. Gage height 5.18 feet.

Accuracy—Records considered good except those estimated, November 25-30, 1934, and for October 24-26, November 12, 13, 15, 16, 1935, and April 2-4, 1936, which are fair. No records December 1, 1934, to March 26, 1935.

Diversions for irrigation above station.

GOOSE CREEK ABOVE LAKE CHEESMAN, COLORADO

Location—Water stage recorder in Sec. 3, T. 10 S., R. 71 W., one mile above high-water line of Lake Cheesman. Sharp crested weir.

Drainage Area—86 square miles. Altitude, 6,835 feet above mean sea level.

Records Available—October, 1924, to September 30, 1936. Acre-foot estimates 1909 to date.

Maximum discharge observed during period 1924-36; 315 second-feet, May 26, 1926. Gage height 3.75 feet.

Maximum Discharge—Year 1935; 168 second-feet June 13, 1935. Gage height 2.75 feet.

Maximum Discharge—Year 1936; 194 second-feet August 19, 1936. Gage height 2.94 feet.

Accuracy—Records considered excellent. No record December 1 to March 22, 1935. For period November 28 to March 15, 1936, computed on basis of daily gage readings, which are fair.

BEAR CREEK AT MORRISON, COLORADO

Location—Water stage recorder in S. E. $\frac{1}{4}$ Sec. 35, T. 4 S., R. 70 W., just above main Turkey Creek Canon highway bridge, at Morrison. From October, 1919, to September, 1934, water stage recorder at Idledale, three miles above; records comparable.

Nearest Tributary—Mount Vernon Creek enters one-quarter mile below.

Drainage Area—165 square miles.

Records Available—April, 1888, to September, 1891, May 1895, to March, 1902, October, 1919, to September 30, 1936.

Maximum discharge observed during period 1888-91, 1895-1902, 1919-36; 8,600 second-feet (estimated) July 24, 1896.

Maximum Discharge—Year 1935; 1,740 second-feet July 12, 1935. Gage height 2.16 feet.

Maximum Discharge—Year 1936; 745 second-feet August 12, 1936. Gage height 2.50 feet.

Accuracy—Records considered fair except for discharges estimated for period from November 27 to January 31, 1935; February 11-17, February 25 to March 1 on basis of three discharge measurements and temperature records. Discharge for period of ice effect December 19, 1935, to February 7, 1936, computed on the basis of two discharge measurements and weather reports.

Small diversions for irrigation above station.

BEAR CREEK AT MOUTH AT SHERIDAN JUNCTION, COLORADO

Location—Water stage recorder in Sec. 5, T. 5 S., R. 68 W., one-half mile southwest of Sheridan Junction and three-fourths mile above mouth.

Drainage Area—259 square miles.

Records Available—April 1 to November 30, 1914; February 23, 1927, to September 30, 1936.

Maximum discharge observed during period 1914, 1927-36; 3,000 second-feet (slope measurement) July 7, 1933. Gage height 6.95 feet.

Maximum Discharge—Year 1935; 612 second-feet July 12, 1935. Gage height 4.33 feet.

Maximum Discharge—Year 1936; 745 second-feet July 11, 1936. Gage height 4.19 feet.

Accuracy—Records considered fair. Discharges estimated January 8-11, 1935, and January 19-23; February 1-21, 1936.

Diversions for storage and irrigation above station.

CLEAR CREEK NEAR GOLDEN, COLORADO

Location—Water stage recorder in Sec. 32, T. 3 S., R. 70 W., 1½ miles above Golden. Welch Ditch diverts water above station.

Nearest Tributary—Beaver Creek enters from south approximately three miles upstream.

Drainage Area—392 square miles. Altitude, 5,620 feet above mean sea level.

Records Available—December 4, 1908, to December 31, 1909; June to September, 1911; January 26, 1912, to September 30, 1936.

Maximum discharge observed during period 1908-9, 1911-36; 5,890 second-feet (slope measurement) September 9, 1933. Gage height 7.97 feet, present datum. Maximum known, 8,700 second-feet August 1, 1888.

Maximum Discharge—Year 1935; 4,900 second-feet August 3, 1935. Gage height 4.83 feet.

Maximum Discharge—Year 1936; 1,840 second-feet May 31, 1936. Gage height 2.76 feet.

Accuracy—Records considered good except those estimated December 1, 1934, to February 28, 1935, and for ice effect period December 16, 1935, to February 29, 1936, which were computed on basis of three discharge measurements and weather records, and are fair. Discharges estimated September 17-18, 1936.

Diversions for irrigation above station.

CLEAR CREEK AT MOUTH NEAR DERBY, COLORADO

Location—Water stage recorder in Sec. 36, T. 2 S., R. 68 W., $\frac{3}{4}$ mile above mouth and $2\frac{1}{4}$ miles west of Derby. Prior to September 24, 1936, recorder 150 feet upstream at 2.43 feet higher datum.

Drainage Area—600 square miles.

Records Available—April 1, 1914, to November 30, 1914, February 25, 1927, to September 30, 1936.

Maximum discharge observed during period 1914, 1927-36; 1,700 second-feet August 3, 1936. Gage height 4.85 feet.

Maximum Discharge—Year 1935; 537 second-feet June 12, 1935. Gage height 4.33 feet.

Maximum Discharge—Year 1936; 1,700 second-feet August 3, 1936. Gage height 4.85 feet, former datum.

Accuracy—Records considered good. Discharge estimated October 1-31, December 4-10, 1934, and for period ice effect December 7 to March 3, 1936 (computed on basis of four discharge measurements and weather records) and estimated for May 9-14, September 18, 19, which records are fair.

Diversions for irrigation above station.

FALL RIVER NEAR IDAHO SPRINGS, COLORADO

Location—Water stage recorder in Sec. 28, T. 3 S., R. 73 W., at mouth, $1\frac{1}{2}$ miles west of Idaho Springs.

Drainage Area—23.6 square miles. Altitude, 7,720 feet above mean sea level.

Records Available—April 1, 1930, to September 30, 1936.

Maximum discharge observed during period 1930-36; 190 second-feet June 13, 1935. Gage height 1.90 feet.

Maximum Discharge—Year 1935; 190 second-feet June 13, 1935. Gage height 1.90 feet.

Maximum Discharge—Year 1936; 130 second-feet May 30, 1936. Gage height 1.60 feet.

Accuracy—Records considered fair for 1935 and good for 1936. Discharge estimated October 22-25, October 28 to March 27, 1935. Ice effect period, November 14- April 12, 1936, computed on the basis of five discharge measurements and weather records. These estimates are fair.

Diversions for storage above station, and flow regulated by storage.

SOUTH BOULDER CREEK NEAR ELDORADO SPRINGS, COLORADO

Location—Water stage recorder in Sec. 26, T. 1 S., R. 71 W., 1 $\frac{1}{4}$ miles west of Eldorado Springs and one mile above Community Dam.

Drainage Area—114 square miles.

Records Available—May 15, 1895, to September 30, 1901; July 1, 1904, to September 30, 1936. Station maintained at Marshall, four miles below from 1895-1901, and at Eldorado Springs, 1904-29. All records were corrected for diversions before publishing, making them comparable.

Maximum discharge observed during period 1888-92, 1895-1901, 1904-36; 1,090 second-feet June 3, 1895.

Maximum Discharge—Year 1935; 477 second-feet June 11, 1935. Gage height 3.75 feet.

Maximum Discharge—Year 1936; 420 second-feet May 16, 1936. Gage height 3.46 feet.

Accuracy—Records considered good except for ice effect period, from November 27, 1934, to January 31, 1935; February 23-26, estimated on basis of two discharge measurements and temperature records, and those estimated April 13, 19, 20, 25, 26, November 1, 2, 9, and November 30 to December 10, December 24-31, 1935; February 8-20, June 8, 9, 1936, which are fair.

Diversions for irrigation above station. Water from Moffat Tunnel Trans-Mountain Diversion was started June 10, 1936. See Fraser River station at West Portal for amounts diverted.

MIDDLE BOULDER CREEK AT NEDERLAND, COLORADO

Location—Water stage recorder in Sec. 13, T. 1 S., R. 73 W., at inlet to Barker Meadow Reservoir below mouth of North Beaver Creek, and just east of Nederland. (Sharp crested weir.)

Drainage Area—38 square miles. Altitude, 8,180 feet above mean sea level.

Records Available—January, 1908, to September 30, 1936.

Complete records furnished by Public Service Company of Colorado.

BOULDER CREEK NEAR ORODELL, COLORADO

Location—Water stage recorder in Sec. 34, T. 1 N., R. 71 W., one-quarter mile below Public Service Power House, and one mile above old Orodell.

Nearest Tributary—Four Mile Creek enters from north, one mile below station.

Drainage Area—105 square miles. Altitude, 5,800 feet above mean sea level.

Records Available—August, 1887, to October, 1888; March, 1907, to December, 1914, February, 1916, to September 30, 1936. Prior to 1917 station maintained just above mouth of Four Mile Creek, one mile downstream.

Maximum discharge observed during period 1887-88, 1907-14, 1916-36; 2,500 second-feet June 6, 1921. Gage height 4.31 feet.

Maximum Discharge—Year 1935; 1,060 second-feet June 15, 1935. Gage height 3.62 feet.

Maximum Discharge—Year 1936; 626 second-feet June 19, 1936. Gage height 3.27 feet.

Accuracy—Records considered good except for those estimated from February 5-20, 1936, which are fair.

Diversions for storage above station. Flow regulated by Barker Meadow Reservoir; capacity 11,500 acre-feet. Low water flow regulated by operation of power plant one-quarter mile above station.

BOULDER CREEK AT MOUTH NEAR LONGMONT, COLORADO

Location—Water stage recorder in NE $\frac{1}{4}$ Sec. 17, T. 2 N., R. 68 W., one-quarter mile below highway bridge, one and one-half miles above mouth and five miles southeast of Longmont.

Drainage Area—512 square miles.

Records Available—March 16, 1927, to September 30, 1936.

Maximum discharge observed during period 1927-36; 860 second-feet May 28, 1935. Gage height 4.62 feet.

Maximum Discharge—Year 1935; 860 second-feet May 28, 1935. Gage height 4.62 feet.

Maximum Discharge—Year 1936; 366 second-feet June 17, 1936. Gage height 2.99 feet.

Accuracy—Records considered good except for ice effect period from January 31 to February 25, and March 27 to April 2, 1936, which were estimated and are fair.

Diversions for storage and irrigation above station.

NORTH ST. VRAIN CREEK AT LONGMONT DAM, NEAR LYONS, COLORADO

Location—Water stage recorder in Sec. 16, T. 3 N., R. 71 W., three-quarters of a mile above Longmont Dam, and four miles west of Lyons. City of Longmont pipe line diverts water below station.

Drainage Area—109 square miles. Altitude, 6,080 feet above mean sea level.

Records Available—1913 to 1917 (partial records); June 1, 1926, to September 30, 1936.

Maximum discharge observed during period 1926-36; 930 second-feet September 6, 1935. Gage height 3.40 feet.

Maximum Discharge—Year 1935; 930 second-feet September 6, 1935. Gage height 3.40 feet.

Maximum Discharge—Year 1936; 598 second-feet June 1, 1936. Gage height 2.72 feet.

Accuracy—Records considered good for 1935, except for those estimated August 16, 17, September 18-21, 1935. Records considered excellent for 1936, except those for July 1 to August 31, which are good. Discharge estimated July 16-18.

Diversions for storage above station.

ST. VRAIN CREEK AT LYONS, COLORADO

Location—Water stage recorder in Sec. 17, T. 3 N., R. 70 W., 300 feet below junction of North and South St. Vrain Creeks, and three-quarters of a mile east of Lyons.

Drainage Area—226 square miles. Altitude, 5,349 feet above mean sea level.

Records Available—August 1, 1887, to October 31, 1890; June 13, 1895, to October 31, 1903; July 1, 1904, to September 30, 1936.

Maximum discharge observed during period 1887-90; 1895-1903; 1904-36; 2,340 second-feet May 27, 1935. Gage height 5.50 feet.

Maximum Discharge—Year 1935; 2,340 second-feet May 27, 1935. Gage height 5.50 feet.

Maximum Discharge—Year 1936; 832 second-feet June 17, 1936. Gage height 3.75 feet.

Accuracy—Records considered good.

Diversions for storage and irrigation above station. Several reservoirs partly regulate flow.

ST. VRAIN CREEK AT MOUTH NEAR PLATTEVILLE, COLORADO

Location—Water stage recorder in Sec. 3, T. 3 N., R. 67 W., at highway bridge one mile above mouth and four miles northwest of Platteville.

Drainage Area—1,000 square miles.

Records Available—April to December 31, 1915; February 24, 1927, to September 30, 1936.

Maximum discharge observed during period 1915, 1927-36 (4,300 second-feet estimated and published and which is somewhat in error). June 14, 1934. Gage height 5.10 feet.

Maximum Discharge—Year 1935; 2,360 second-feet May 28, 1935. Gage height 5.08 feet.

Maximum Discharge—Year 1936; 1,420 second-feet June 11, 1936. Gage height 4.13 feet.

Accuracy—Records considered good except for those estimated, December 11-15, 1934; December 26, 1934, to January 9, 1935; January 19 to February 1, 1935, and for period ice effect December 15 to February 28, 1936, which were computed on basis of discharge measurements and weather records, and are fair.

Diversions for irrigation above station.

LEFTHAND CREEK AT MOUTH AT LONGMONT, COLORADO

Location—Water stage recorder in Sec. 10, T. 2 N., R. 69 W., three-quarters of a mile above mouth and one mile south of Longmont.

Drainage Area—74 square miles. Altitude, 4,990 feet above mean sea level.

Records Available—March 1, 1927, to September 30, 1936.

Maximum discharge observed during period 1927-36; 252 second-feet May 10, 1928. Gage height 2.20 feet.

Maximum Discharge—Year 1935; 228 second-feet May 18, 1935. Gage height 3.10 feet.

Maximum Discharge—Year 1936; 161 second-feet June 10, 1936. Gage height 2.59 feet.

Accuracy—Records considered fair. Discharge estimated December 1-14, 1934; January 1-5, 14-31; February 26-28, 1935. Discharge computed December 15 to February 29, 1936, on the basis of three discharge measurements and weather records. May 30 to July 7, August 4, 8-13, on the basis of two discharge measurements, and intermittent staff gage readings.

Diversions for irrigation above station.

BIG THOMPSON RIVER NEAR ESTES PARK, COLORADO

Location—Water stage recorder in Sec. 29, T. 5 N., R. 72 W., one and one-half miles east of Estes Park.

Drainage Area—157 square miles. Altitude, 7,424 feet above mean sea level.

Records Available—June, 1930, to September 30, 1936. (Prior to February, 1934, station was maintained one and one-half miles downstream. Records comparable.)

Maximum discharge observed during period 1930-36; 1,590 second-feet June 16, 1935. Gage height 5.54 feet.

Maximum Discharge—Year 1935; 1,590 second-feet June 16, 1935. Gage height 5.54 feet.

Maximum Discharge—Year 1936; 1,100 second-feet July 11, 1936. Gage height 4.43 feet.

Accuracy—Records considered good except those for November

15-17, November 28, 1934, to March 27, 1935, which were estimated on basis of five discharge measurements, and temperature records; and those for December 5, 1935, to April 17, 1936, which were computed on basis of four discharge measurements and weather reports, and which are fair.

Diversions for irrigation above station.

BIG THOMPSON RIVER BELOW POWER HOUSE NEAR DRAKE, COLORADO

Location—Water stage recorder in NW $\frac{1}{4}$ Sec. 7, T. 5 N., R. 70 W., one-quarter mile below city of Loveland hydroelectric plant, and four and one-half miles east of Drake. Cedar Creek enters one-eighth mile downstream.

Drainage Area—277 square miles.

Records Available—October 1, 1928, to September 30, 1936. Records comparable at site three miles upstream, from September, 1917, to December, 1926.

Maximum discharge observed during period 1929-36, 1,950 second-feet June 14, 1935. Gage height 5.00 feet. Maximum known discharge estimate 8,000 second-feet July 31, 1919.

Maximum Discharge—Year 1935; 1,950 second-feet June 14, 1935. Gage height 5.00 feet.

Maximum Discharge—Year 1936; 1,320 second-feet June 28, 1936. Gage height 4.15 feet.

Accuracy—Records considered excellent except for those estimated October 4, December 13, 14, 1934; January 17, February 24, April 16, May 5-6, September 6, 7, 26, 27, 1935; and those for January 18, 19, July 2-8, August 20, 1936; which were computed on the basis of records for station near Estes Park and are fair.

Diversions for irrigation above station. City of Loveland furnishes gage height record.

BIG THOMPSON RIVER AT MOUTH NEAR LA SALLE, COLORADO

Location—Water stage recorder in SW $\frac{1}{4}$ Sec. 34, T. 5 N., R. 66 W., at first bridge across Big Thompson River, one mile above mouth and four miles west of La Salle.

Drainage Area—818 square miles.

Records Available—April 1 to November 30, 1914; March 1, 1927, to September 30, 1936.

Maximum discharge observed during period 1914, 1927-36; 1,300 second-feet July 29, 1932. Gage height 5.22 feet.

Maximum Discharge—Year 1935; 748 second-feet June 12, 1935. Gage height 3.85 feet.

Maximum Discharge—Year 1936; 364 second-feet July 12, 1936. Gage height 2.64 feet.

Accuracy—Records considered good except for period of ice effect from February 5-25, 1936, computed on basis of weather records, and those for May 29, June 5, June 30 to July 3, July 10, 16, 1936, based on records of adjacent stations, which are fair.

Diversions for irrigation above station.

CACHE LA POUDRE RIVER AT MOUTH OF CANON NEAR FORT COLLINS, COLORADO

Location—Water stage recorder in Sec. 15, T. 8 N., R. 70 W., three miles below intake of Fort Collins water works, and eleven miles west of Fort Collins.

Drainage Area—1,048 square miles. Altitude 5,070 feet above mean sea level.

Records Available—May 15, 1884, to September 30, 1936.

Maximum discharge observed during period 1884-1936; 8,550 second-feet June 15, 1923. Gage height 7.40 feet.

Greatest maximum discharge known occurred May 20, 1904; discharge not determined.

Maximum Discharge—Year 1935; 4,110 second-feet July 22, 1935. Gage height 5.52.

Maximum Discharge—Year 1936; 3,290 second-feet June 1, 1936. Gage height 4.76 feet.

Accuracy—Records considered excellent except for those estimated January 19-21, 1935, and those for period of ice effect, December 15, December 17, 1935, to March 6, 1936, which were computed on basis of three discharge measurements and weather records, and are fair.

Diversions for storage and irrigation above station; Trans-Mountain inflow from the Colorado, Michigan and Laramie Rivers above station.

CACHE LA POUDRE RIVER NEAR MOUTH NEAR GREELEY, COLORADO

Location—Water stage recorder in Sec. 2, T. 5 N., R. 65 W., two miles east of Greeley and two and one-half miles above mouth at highway bridge.

Drainage Area—1,840 square miles.

Records Available—March 24, 1903, to November 30, 1904; February 1, 1914, to December 17, 1919; and May 27, 1924, to September 30, 1936.

Maximum discharge observed during period 1903-4, 1914-19, 1924-36; 4,240 second-feet June 26, 1917. Gage height 7.3 feet.

Maximum Discharge—Year 1935; 2,480 second-feet June 17, 1935. Gage height 6.49 feet.

Maximum Discharge—Year 1936; 655 second-feet June 5, 1936. Gage height 5.15 feet.

Accuracy—Records considered good except those for May 15 to July 15, 1935, and for ice effect period from February 7-11, 16-22, and April 20-25, 1936, which were estimated and are fair.

Diversions for irrigation above station.

NORTH FORK OF REPUBLICAN RIVER AT COLORADO-NEBRASKA STATE LINE

Location—Water stage recorder in Sec. 10, T. 1 N., R. 42 W., 100 feet east of Colorado-Nebraska State Line.

Zero of gage is 3,336.09 feet above mean sea level.

Records Available—March, 1931, to September 30, 1936.

Maximum discharge observed during period 1931-36; 433 second-feet (from rating curve extended above 100 second-feet) May 29, 1936. Gage height 3.71 feet.

Maximum Discharge—Year 1935; 367 second-feet June 1, 1935. Gage height 3.49 feet.

Maximum Discharge—Year 1936; 433 second-feet May 29, 1936. Gage height 3.71 feet.

Accuracy—Records considered good except those for December 23, 1934, to January 2, 1935; January 20-21, February 20, 21, February 25 to March 2, which were estimated on basis of weather records. Discharge for periods of missing gage height, October 31, 1935; November 1-3, 20, December 7-11, 20-22, 1935; January 30, 1936, to February 23, April 24-26, April 30 to May 3, which were computed on the basis of one discharge measurement and weather records, and are fair.

Diversions for irrigation above station.

GRIZZLY CREEK NEAR WALDEN, COLORADO

Location—Water stage recorder in Sec. 29, T. 8 N., R. 80 W., ten miles south of Walden and one-half mile above junction with Little Grizzly Creek.

Drainage Area—229 square miles.

Records Available—May, 1904, to October, 1905; May to September, 1923; October, 1926, to September 30, 1936.

Maximum discharge observed during period 1904-5, 1923, 1926-34; 1,340 second-feet June 10, 1923. Gage height 4.8 feet.

Maximum Discharge—Year 1935; 330 second-feet June 13, 1935. Gage height 2.92 feet.

Maximum Discharge—Year 1936; 590 second-feet April 23, 1936. Gage height 3.95 feet.

Accuracy—Records considered good except those estimated June 10, 11, September 22-30, 1935; October 25-27, 1935; and July 14-20, 1936, on basis of records for North Platte River at Walden, and which are fair.

Diversions for irrigation above station.

LITTLE GRIZZLY CREEK AT MOUTH NEAR HEBRON, COLORADO

Location—Staff gage in Sec. 32, T. 8 N., R. 80 W., one mile above junction with Grizzly Creek and three miles north of Hebron.

Drainage Area—96 square miles.

Records Available—June, 1904, to October, 1905; June, 1931, to September 30, 1936.

Maximum discharge observed during period 1904-5, 1931-36; 592 second-feet June 11, 1905.

Maximum Discharge—Year 1935; 496 second-feet June 15, 1935. Gage height 4.78 feet.

Maximum Discharge—Year 1936; 525 second-feet June 1, 1936. Gage height 4.96 feet.

Accuracy—Records considered good except those for November 28, 1934, to April 8, 1935, which were estimated on basis of one discharge measurement, and for November 11-15, 24-30, 1935, which are fair and were computed on basis of weather records, gage heights and comparison with adjacent stations. Gage read twice daily.

Diversions for irrigation above station.

ROARING FORK NEAR WALDEN, COLORADO

Location—Water stage recorder in Sec. 11, T. 8 N., R. 81 W., at highway bridge ten miles southwest of Walden.

Drainage Area—84 square miles.

Records Available—May, 1904, to October, 1905; October, 1923, to September 30, 1936.

Maximum discharge observed during period 1904-5, 1923-36; 790 second-feet June 15, 1924. Gage height 3.73 feet.

Maximum Discharge—Year 1935; 461 second-feet June 15, 1935. Gage height 3.72 feet.

Maximum Discharge—Year 1936; 544 second-feet June 1, 1936. Gage height 3.30 feet.

Accuracy—Records considered good for 1935, except those for December 6 to March 29, 1935, which were estimated on the basis of one discharge measurement and temperature records, and those estimated June 9-13, 16-19, August 5-12, 1935. Records are excellent for 1936, except those computed for October 17-19, 1935; April 24, 25, 1936, on basis of records for adjacent stations.

Diversions for irrigation above station.

NORTH PLATTE RIVER NEAR WALDEN, COLORADO

Location—Water stage recorder in Sec. 6, T. 8 N., R. 80 W., at highway bridge eight miles southwest of Walden. Roaring Fork enters above station.

Drainage Area—446 square miles.

Records Available—May 13, 1904, to October 31, 1905; October 1, 1923, to September 30, 1936.

Maximum discharge observed during period 1904-5, 1923-36; 1,770 second-feet June 1, 1928. Gage height 5.33 feet.

Maximum Discharge—Year 1935; 1,640 second-feet June 15, 1935. Gage height 4.94 feet.

Maximum Discharge—Year 1936; 1,580 second-feet June 1, 1936. Gage height 4.86 feet.

Accuracy—Records considered good for 1935, except those for October 20, November 2, 1934, to March 29, April 2-4, 6-13, 15, 16, May 26, 28, 1935, which were estimated by comparison with North Platte near Northgate. Records excellent for 1936, except those for periods of ice effect, November 12, 13, 15, December 1, 1935, to April 18, 1936, which are fair and were computed on basis of record for station at Northgate.

Diversions for irrigation above station.

NORTH PLATTE RIVER NEAR NORTHGATE, COLORADO

Location—Water stage recorder in Sec. 11, T. 11 N., R. 80 W., at highway bridge six miles south of Colorado-Wyoming State Line, and six miles northwest of Northgate.

Drainage Area—1,440 square miles. Altitude, 7,600 feet above mean sea level.

Records Available—May to November, 1904; May, 1915, to September 30, 1936.

Maximum discharge observed during period 1904, 1915-36; 6,720 second-feet June 11, 1923. Gage height 6.24 feet.

Maximum Discharge—Year 1935; 3,470 second-feet June 17, 1935. Gage height 4.16 feet.

Maximum Discharge—Year 1936; 4,640 second-feet April 16, 1936.

Accuracy—Records considered excellent except those for period of ice effect from November 15, 1934, to April 9, 1935, estimated on basis of four discharge measurements, and for November 11, 1935, to April 15, 1936, computed on basis of one discharge measurement and comparison of records at Saratoga, Wyoming.

Diversions for irrigation above station.

WILLOW CREEK NEAR RAND, COLORADO

Location—Water stage recorder in Sec. 23, T. 6 N., R. 79 W., 2.6 miles northwest of Rand, and two and one-half miles above mouth.

Drainage Area—62 square miles.

Records Available—July 10, 1931, to September 30, 1936.

Maximum daily discharge observed during period 1931-36; 268 second-feet May 23, 1932.

Maximum Discharge—Year 1935; 162 second-feet June 16, 1935. Gage height 3.21 feet.

Maximum Discharge—Year 1936; 130 second-feet June 2, 1936. Gage height 2.98 feet.

Accuracy—Records considered good except those estimated October 24-29, 1934, and for October 30, 31, 1935, and May 12-16, 1936, which are fair. No records November 7, 1934, to April 15, 1935; November 1, 1935, to April 19, 1936.

Diversions for irrigation above station.

ILLINOIS CREEK NEAR RAND, COLORADO

Location—Water stage recorder in Sec. 30, T. 6 N., R. 78 W., one mile north of Rand and two and one-half miles above mouth of Willow Creek.

Drainage Area—77 square miles.

Records Available—July 11, 1931, to September 30, 1936.

Maximum daily discharge observed during period 1931-36; 655 second-feet May 23, 1931.

Maximum Discharge—Year 1935; 520 second-feet June 16, 1935. Gage height 2.08 feet.

Maximum Discharge—Year 1936; 328 second-feet April 21, 1936. Gage height 1.66 feet.

Accuracy—Records considered good. Discharge estimated October 30, 1934; October 30, 31, 1935. No record November 1, 1934, to April 15, 1935, and November 1, 1935, to April 19, 1936.

Diversions for irrigation above station.

ILLINOIS CREEK AT WALDEN, COLORADO

Location—Water stage recorder in NW $\frac{1}{4}$ Sec. 29, T. 9 N., R. 79 W., one-half mile southwest of Walden. Prior to March 30, 1935, staff gage was used 300 feet upstream at different datum.

Drainage Area—254 square miles.

Records Available—May 1, 1917, to August 31, 1918, and May 1, 1923, to September 30, 1936.

Maximum discharge observed during period 1917-18, 1923-36; 2,520 second-feet May 28, 1926. Gage height 6.4 feet, former datum.

Maximum Discharge—Year 1935; 430 second-feet June 18, 1935. Gage height 2.35 feet.

Maximum Discharge—Year 1936; 262 second-feet April 22, 1936. Gage height 2.05 feet.

Accuracy—Records considered good except for those estimated December 1, 1934, to March 31, 1935, on basis of two discharge measurements and temperature records, and April 30 to May 4, 1935; September 3-9, November 29 to December 4, 1935, which are fair. No records January 1, 1935, to April 1, and from December 14, 1935, to April 21, 1936.

Diversions for irrigation above station.

MICHIGAN RIVER NEAR LINDLAND, COLORADO

Location—Water stage recorder in Sec. 21, T. 7 N., R. 77 W., at Cameron Pass highway bridge three miles southeast of Lindland, and one mile above mouth of North Fork of Michigan River.

Drainage Area—62 square miles.

Records Available—July 12, 1931, to September 30, 1936.

Maximum discharge observed during period 1931-36; 663 second-feet June 11, 1933. Gage height 3.08 feet.

Maximum Discharge—Year 1935; 547 second-feet June 16, 1935. Gage height 3.07 feet.

Maximum Discharge—Year 1936; 309 second-feet May 28, 1936. Gage height 1.93 feet.

Accuracy—Records considered good except for those estimated November 28-30, 1934; April 18-21, 1935. No records December 1 to April 16, 1935, and from November 1, 1935, to April 22, 1936.

Diversions for irrigation above station.

MICHIGAN RIVER AT WALDEN, COLORADO

Location—Water stage recorder in NW $\frac{1}{4}$ Sec. 21, T. 9 N., R. 79 W., one-half mile north of Walden.

Drainage Area—185 square miles. Zero of gage is 8,044.87 feet above mean sea level.

Records Available—May 8, 1904, to October 31, 1905; June 1, 1908, to July 26, 1918; May 1, 1923, to September 30, 1936.

Maximum discharge observed during period 1904-05, 1923-36; 1,070 second-feet June 10, 1923. Gage height 3.3 feet.

Maximum Discharge—Year 1935; 569 second-feet June 16, 1935. Gage height 2.95 feet.

Maximum Discharge—Year 1936; 403 second-feet April 20, 1936. Gage height 2.55 (mean daily) feet.

Accuracy—Records considered good except those estimated November 8-10, 27-30, and those for period of ice effect, December 1, 1934, to April 14, 1935, which were estimated on basis of one discharge measurement and temperature records, and those estimated for November 12, 13, 1935; April 21, April 27 to May 2, June 29 to July 4, July 11, 12, August 3-9, 13-15, 17-22, 1936, which are fair.

Diversions for irrigation above station.

LARAMIE RIVER NEAR GLENDEVEY, COLORADO

Location—Water stage recorder in Sec. 25, T. 10 N., R. 76 W., just below mouth of Nunn Creek and above Stub Creek at Sholines Ranch, and one and one-half miles north of present location of Glendevey Post Office.

Drainage Area—101 square miles.

Records Available—June 24, 1904, to October 31, 1905; August 18, 1910, to September 30, 1936.

Maximum discharge observed during period 1904-05, 1910-36; 2,240 second-feet June 9, 1923.

Maximum Discharge—Year 1935; 1,060 second-feet June 16, 1935. Gage height 3.32 feet.

Maximum Discharge—Year 1936; 377 second-feet June 16, 1936. Gage height 2.93 feet.

Accuracy—Records considered excellent except for those estimated November 27-30, 1934; April 1-7, 1935; November 10-12, 29, 30, 1935, and July 1-6, 1936, which are good and were computed on basis of records for station near Jelm, Wyoming.

Diversions for irrigation and trans-mountain diversion above station.

LARAMIE RIVER NEAR JELM, WYOMING

Location—Water stage recorder in Sec. 15, T. 12 N., R. 77 W., one-half mile north of Colorado-Wyoming State Line and four miles south of Old Jelm. Johnson Creek enters one-half mile below station.

Drainage Area—297 square miles. Zero of gage is 7,688.32 feet above mean sea level.

Records Available—June, 1904, to October, 1905; May 7, 1911, to September 30, 1936.

Maximum discharge observed during period 1904-05, 1911-36; 4,200 second-feet June 9, 1923. Gage height 4.15 feet.

Maximum Discharge—Year 1935; 1,790 second-feet June 14, 1935. Gage height 3.81 feet.

Maximum Discharge—Year 1936; 1,130 second-feet June 1, 1936. Gage height 3.19 feet.

Accuracy—Records considered excellent except those for period of ice effect, November 26, 1934, to April 3, 1935, which were estimated on basis of three discharge measurements and temperature records, and those for November 30, 1935, to April 15, 1936, which were computed on basis of two discharge measurements, gage heights and temperature records, and those estimated October 18-23, 1935, which are good.

Diversions for irrigation above station.

Discharge of South Platte River at Eleven Mile Canon, Near Lake George, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	19	23	20	2	2	2	32	16	6	89	493	140
2....	20	23	18	2	2	2	32	16	5	76	403	128
3....	21	23	10	2	2	2	32	16	4	107	330	101
4....	22	23	10	2	2	2	18	16	3	189	281	84
5....	22	23	10	2	2	2	24	18	3	150	264	65
6....	22	23	10	2	2	4	24	19	3	112	246	53
7....	22	23	10	2	2	4	24	17	3	105	233	134
8....	21	23	10	2	2	6	30	17	2	134	228	241
9....	17	22	6	2	2	10	94	19	2	170	220	233
10....	11	23	6	2	2	6	241	18	2	161	189	103
11....	14	23	2	2	2	12	241	17	34	128	132	75
12....	24	23	2	2	2	15	300	17	226	283	130	53
13....	23	23	2	2	2	15	330	23	256	427	120	29
14....	24	23	2	2	2	20	333	32	316	267	118	53
15....	23	23	2	2	2	26	344	61	391	194	114	132
16....	23	23	2	2	2	26	341	54	373	140	109	130
17....	23	23	2	2	2	26	335	40	338	116	107	74
18....	23	22	2	2	2	26	341	53	159	153	109	61
19....	22	22	2	2	2	26	358	55	70	302	91	66
20....	22	22	2	2	2	26	400	36	40	177	81	70
21....	23	22	2	2	2	26	394	27	42	238	136	46
22....	23	23	2	2	2	76	361	22	94	591	103	33
23....	22	23	2	2	2	111	82	19	191	598	122	29
24....	22	22	2	2	2	46	54	17	184	454	153	41
25....	23	22	2	2	2	17	58	17	134	313	130	52
26....	22	22	2	2	2	22	40	16	126	201	223	41
27....	22	22	2	2	2	23	24	13	124	98	155	59
28....	23	23	2	2	2	30	19	13	126	84	409	98
29....	22	23	2	2	2	32	16	13	138	112	241	101
30....	23	19	2	2	2	32	17	10	122	478	168	99
31....	23	2	2	2	2	32	8	8	563	148	...	...
Total	666	677	152	62	56	705	4939	735	3517	7210	5986	2624
Mean.	21.5	22.6	4.90	2.00	2.00	22.7	165	23.7	117	233	193	87.5
Max..	24	23	20	2	2	111	400	61	391	598	493	241
Min..	11	19	2	2	2	2	16	8	2	76	81	29
Acre-ft.	1320	1340	301	123	111	1400	9800	1460	6980	14300	11870	5200

Total run-off for water year 1934-35 = 54,205 acre-feet.

Discharge of South Platte River at Eleven Mile Canon, Near Lake George, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	99	34	...	...	...	...	...	67	248	299	306	130
2....	74	34	...	...	...	...	...	31	386	150	421	141
3....	32	16	...	...	...	...	...	38	322	57	509	130
4....	41	0.1	...	...	...	...	...	38	199	48	407	78
5....	39	0	...	...	...	...	...	37	181	48	197	74
6....	18	0	...	...	...	...	...	37	155	67	621	71
7....	28	8.6	...	...	...	...	...	50	102	100	624	71
8....	34	38	...	...	...	...	...	91	71	100	92	71
9....	58	49	...	...	...	...	...	192	71	100	22	70
10....	85	49	...	...	...	...	...	139	72	143	258	68
11....	51	48	...	...	...	...	...	164	100	231	495	68
12....	35	60	...	...	...	...	...	122	314	327	532	55
13....	35	67	...	...	...	...	...	75	306	327	492	45
14....	34	65	...	...	...	...	...	25	126	325	380	52
15....	34	64	...	...	...	...	...	12	92	228	132	52
16....	34	65	...	...	...	...	25	35	54	139	54	52
17....	126	46	...	...	...	...	25	54	62	139	100	41
18....	78	28	...	...	*48	24	167	122	139	186	35	35
19....	70	28	...	...	...	25	236	97	137	266	35	35
20....	50	42	...	...	...	25	276	199	238	317	35	35
21....	50	62	...	...	...	23	268	179	306	288	46	46
22....	50	62	...	...	...	21	172	113	238	288	77	77
23....	50	61	...	...	...	38	181	319	162	148	84	84
24....	50	54	...	...	...	57	254	524	162	57	34	34
25....	53	36	...	...	...	107	148	633	162	89	18	18
26....	53	36	...	...	...	107	150	467	139	115	18	18
27....	53	35	...	...	...	104	317	128	118	117	18	18
28....	33	34	...	...	...	104	413	109	364	117	18	18
29....	23	27	...	...	...	104	445	256	462	115	82	82
30....	34	11	...	...	...	104	413	484	278	115	195	195
31....	34	...	...	...	...	...	236	...	190	113	...	...
Total	1538	1159.7	...	...	...	893	4883	6491	5923	7973	1964	
Mean.	49.6	38.7	...	...	...	Apr. 16	158	216	191	257	65.5	
Max..	126	67	...	...	...	to 30	445	633	462	624	195	
Min..	18	0	...	...	...	...	12	54	48	22	18	
Acre-ft.	3050	2300	...	...	...	1770	9690	12870	11750	15810	3900	

Total run-off for period = 61,140 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

**Discharge of South Platte River Above Lake Cheesman, Colorado, for Year
Ending Sept. 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	28						50	24	66	103	726
2	30	28						49	28	59	87	467
3	30	27						48	31	54	121	415
4	29	30						49	30	47	204	292
5	29	29						42	28	42	210	266
6	28	28						40	32	38	203	220
7	29	28						41	31	36	159	196
8	28	31						42	35	31	172	200
9	26	32						44	34	30	182	175
10	23	32						147	36	28	193	150
11	18	32						200	35	28	150	133
12	16	32						220	34	250	240	113
13	24	31						309	47	286	453	104
14	26	30						326	74	429	424	89
15	26	30						344	117	434	249	82
16	26	29						348	159	424	200	79
17	25	31						344	168	304	144	78
18	26	29						339	208	172	200	73
19	26	29						348	208	117	326	70
20	26	32						420	172	86	283	59
21	30	35						384	141	88	266	57
22	28	28						352	135	118	462	58
23	28	36						200	128	211	709	61
24	28	39						63	92	126	198	548
25	28	36						40	90	113	148	438
26	27	34						34	83	104	146	296
27	26	32						38	66	100	142	190
28	28	30						44	51	95	142	117
29	28	30						54	45	97	158	126
30	27	30						55	33	88	140	348
31	28							52		78	755	75
Total	825	928						380	5146	2736	4452	8558
Mean.	26.6	30.9						Mar. 24	172	88.3	148	276
Max..	30	39						to 31	420	208	434	755
Min...	16	27							33	24	28	87
Acre-ft.	1640	1840							754	10210	5430	8830
										16970	16970	9360
												3520

Total run-off for period = 58,554 acre-feet.

**Discharge of South Platte River Above Lake Cheesman, Colorado, for Year
Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56							40	139	476	628	1080
2	57							40	78	768	375	1110
3	46							40	55	642	210	992
4	34							40	56	544	126	1040
5	44							40	54	454	114	719
6	34							40	51	360	99	1540
7	32							40	60	324	142	1590
8	34							40	139	198	153	1150
9	35							40	494	168	304	677
10	46							36	500	164	277	470
11	47							40	300	410	380	684
12	34							42	410	684	442	810
13	32							63	198	684	565	950
14	32							168	172	390	454	642
15	32							172	118	263	380	482
16	32							118	93	200	218	277
17	31							99	100	168	181	288
18	44							108	144	218	181	405
19	42							112	292	168	181	524
20	40							114	360	195	205	621
21	40							118	400	442	385	705
22	40							122	390	256	390	684
23	40							135	277	518	263	530
24	40							153	370	950	215	164
25	40							170	448	1110	212	157
26	40							168	334	922	210	240
27	40							155	454	415	179	246
28	40							157	740	263	296	256
29	40							155	894	292	719	256
30	40							148	845	628	866	270
31	40							656		712	260	
Total	1224							2913	9621	13274	10062	19819
Mean.	39.5							97.1	310	442	325	639
Max..	57							172	894	1110	866	1590
Min...	31							36	51	164	99	157
Acre-ft.	2430							5780	19080	26330	19960	39310
												8630

Total run-off for period = 121,520 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of South Platte River Below Lake Cheesman, Colorado for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	143	78	39	....	....	16	77	68	11	200	1070	304
2....	141	73	36	....	....	16	79	69	11	172	724	281
3....	141	39	27	....	....	16	86	55	11	172	538	250
4....	136	26	21	....	....	16	74	49	11	172	435	250
5....	126	26	18	....	....	16	67	48	11	181	374	227
6....	124	28	18	....	....	17	66	48	11	245	396	181
7....	122	40	18	*18	....	17	61	48	12	236	343	141
8....	133	51	18	....	....	17	59	70	12	222	362	220
9....	136	45	18	....	....	17	59	82	12	222	438	238
10....	135	41	14	....	....	17	59	75	12	242	385	198
11....	133	41	*25	....	....	*17	59	74	12	245	306	198
12....	121	41	20	....	....	17	59	73	12	222	317	198
13....	115	41	20	....	....	17	54	72	12	388	337	196
14....	118	41	16	....	*15	42	48	121	12	551	225	130
15....	118	41	16	....	....	42	41	187	13	396	250	130
16....	133	41	15	....	....	90	41	192	13	293	306	206
17....	118	40	15	....	....	90	42	254	13	198	317	233
18....	108	40	15	....	....	90	53	111	13	276	317	177
19....	108	40	16	....	....	61	80	8	25	423	291	144
20....	104	36	15	....	....	86	108	7	118	548	266	194
21....	95	35	15	....	....	86	120	9	126	495	204	227
22....	100	44	15	....	....	110	97	15	143	584	259	162
23....	111	45	15	....	....	200	82	15	162	944	453	160
24....	107	45	15	....	....	143	115	15	291	912	459	143
25....	98	45	15	....	....	84	101	15	324	735	513	143
26....	98	33	15	....	....	38	67	15	192	411	504	190
27....	109	37	15	....	....	54	80	15	159	231	574	210
28....	102	45	15	....	....	54	73	13	188	154	429	194
29....	72	43	15	....	....	54	62	12	188	130	535	222
30....	72	43	15	....	....	61	56	11	206	301	354	269
31....	75	15	....	....	....	73	11	....	900	252	....	....
Total	3552	1264	565	....	....	1674	2125	1857	2336	11401	12433	6016
Mean	115	42.1	18.2	16.0	15.0	54.0	70.8	59.9	77.9	368	401	201
Max.	143	78	39	....	....	200	120	254	324	944	1070	304
Min.	72	26	14	....	....	16	41	7	11	130	204	130
Acre-ft.	7050	2510	1120	984	833	3320	4210	3680	4630	22610	24660	11930

Total run-off for water year 1934-35=87,540 acre-feet.

Discharge of South Platte River Below Lake Cheesman, Colorado for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	240	76	18	6.5	7.0	7.6	7.2	154	618	777	1090	398
2....	234	79	18	6.5	7.0	7.6	7.4	154	720	378	1270	395
3....	217	67	18	6.5	7.0	7.6	7.4	112	773	341	824	409
4....	158	61	18	6.5	7.0	7.6	7.4	145	653	206	591	381
5....	134	60	18	6.5	7.0	7.6	7.4	145	541	149	402	222
6....	136	60	18	6.5	7.0	7.6	7.6	138	484	106	54	224
7....	136	59	18	6.5	7.0	7.6	7.8	116	484	98	45	258
8....	117	56	18	6.5	7.0	7.6	7.6	98	284	120	39	503
9....	122	47	18	6.5	7.0	7.6	7.6	247	184	234	76	434
10....	164	58	16	*6.5	7.0	7.6	7.6	630	49	367	732	549
11....	281	75	16	6.5	7.5	7.6	7.4	541	16	317	860	511
12....	164	73	16	6.5	7.5	7.6	7.4	618	16	454	579	451
13....	116	79	16	6.5	7.5	7.6	18	454	16	937	90	240
14....	82	95	16	6.5	7.5	7.6	80	357	16	842	777	227
15....	82	96	10	6.5	7.5	7.6	266	357	17	716	626	194
16....	82	97	8	6.5	8.0	7.6	275	220	27	360	269	194
17....	82	97	8	6.5	8.0	7.6	165	167	104	360	215	215
18....	101	97	8	6.5	8.0	7.6	140	290	141	212	454	208
19....	123	97	8	6.5	8.0	7.6	140	332	167	234	653	190
20....	123	75	8	6.5	8.0	*7.6	167	499	240	266	716	171
21....	123	68	7	6.5	8.0	7.4	190	541	545	430	777	167
22....	160	67	7	6.5	8.0	7.4	190	533	503	430	696	167
23....	167	67	7	6.5	8.0	7.4	190	549	568	426	653	157
24....	118	66	7	6.5	8.0	7.4	164	514	906	247	272	157
25....	120	87	7	6.5	8.0	7.4	206	511	1440	230	117	147
26....	120	101	7	6.5	7.6	7.4	247	454	991	299	222	147
27....	120	101	7	6.5	7.6	7.2	247	537	480	296	357	145
28....	125	90	7	6.5	7.6	7.2	230	704	320	348	329	98
29....	138	66	7	6.5	7.6	7.2	199	847	247	676	329	136
30....	120	42	7	6.5	....	7.2	167	910	526	986	284	203
31....	86	7	6.5	....	....	7.2	852	618	469	....	....	....
Total	4291	2259	369	201.5	217.9	232.4	3370.8	12726	12076	12460	14867	7898
Mean	138	75.3	11.9	6.50	7.51	7.50	112	411	403	402	480	263
Max.	281	101	18	6.5	8.0	7.6	275	910	1440	986	1270	549
Min.	82	42	7	6.5	7.0	7.2	7.2	98	16	98	39	98
Acre-ft.	8510	4480	732	400	432	461	6690	25240	23950	24710	29490	15670

Total run-off for water year 1935-36=140,765 acre-feet.

*Discharge measurement.

**Discharge of North Fork of South Platte River at South Platte, Colorado, for Year
Ending Sept. 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	40	...	...	...	30	51	61	329	245	363	112
2	52	45	...	...	...	30	45	61	318	233	360	118
3	51	41	...	...	...	28	45	55	318	285	352	106
4	51	42	...	...	...	28	45	53	329	302	346	102
5	50	46	...	...	...	26	46	51	329	270	332	96
6	50	45	...	...	...	26	47	52	349	233	289	91
7	50	45	...	*34	...	28	40	57	377	233	270	94
8	50	47	...	...	...	28	39	60	448	245	201	168
9	46	44	...	...	...	30	39	65	444	245	204	173
10	46	45	...	...	...	30	37	66	518	251	178	133
11	45	36	*42	...	...	30	32	71	594	248	155	112
12	39	35	...	...	...	31	32	76	649	325	173	102
13	36	42	...	...	...	31	35	83	676	322	140	94
14	39	39	...	...	*32	31	41	108	668	242	122	89
15	44	36	...	...	...	31	48	138	633	298	118	89
16	46	36	...	...	...	32	60	138	618	239	118	89
17	46	42	...	...	...	33	60	129	529	206	236	85
18	51	41	...	...	...	34	57	198	474	308	184	84
19	47	42	...	...	...	34	46	227	437	254	140	82
20	47	36	...	...	...	35	51	191	440	266	204	78
21	35	36	...	...	...	36	58	158	448	295	209	78
22	37	34	...	...	...	36	57	198	437	384	212	78
23	44	32	...	...	...	36	60	206	419	370	248	80
24	48	48	...	...	...	39	65	315	405	322	257	78
25	45	41	...	...	...	39	66	332	380	285	227	77
26	46	32	...	...	...	39	56	329	352	251	198	85
27	44	32	...	...	...	45	70	342	322	227	150	98
28	40	32	...	...	...	42	71	339	292	209	125	96
29	35	32	...	...	...	42	70	329	276	206	118	100
30	45	32	...	...	...	48	64	329	260	380	108	100
31	39	...	...	...	...	51	...	346	419	100	...	...
Total	1395	1176	...	...	...	1058	1533	5163	13068	8598	6437	2967
Mean.	45.0	39.2	40.0	33.0	32.0	34.1	51.1	167	436	277	208	98.9
Max.	52	48	...	...	...	51	71	346	676	419	363	173
Min.	35	32	...	...	...	26	32	51	260	206	100	77
Acre-ft.	2770	2330	2460	2030	1780	2100	3040	10240	25920	17050	12770	5850

Total run-off for water year 1934-35=88,370 acre-feet.

**Discharge of North Fork of South Platte River at South Platte, Colorado, for Year
Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	90	46	...	...	...	55	146	545	488	413	258	...
2	83	50	...	...	...	54	146	524	446	388	248	...
3	74	52	...	...	...	66	179	504	402	402	215	...
4	76	47	...	...	...	67	243	484	352	488	235	...
5	73	36	...	...	...	60	293	465	349	563	221	...
6	69	44	...	...	...	54	337	446	325	830	212	...
7	67	47	...	...	...	51	308	427	305	761	221	...
8	67	46	...	...	...	62	268	442	288	678	208	...
9	67	46	...	...	...	67	233	492	305	633	245	...
10	67	46	*36	*27	...	65	235	643	319	624	258	...
11	66	40	...	...	...	67	266	678	308	604	266	...
12	60	40	...	...	...	84	331	609	384	653	248	...
13	59	49	...	...	...	103	388	586	384	545	233	...
14	59	42	...	...	...	134	454	500	334	504	226	...
15	56	35	...	...	...	139	545	581	299	446	181	...
16	54	31	...	...	...	148	576	554	277	416	143	...
17	58	32	...	...	...	166	595	554	258	435	112	...
18	62	37	...	...	...	175	533	533	261	512	87	...
19	66	37	...	...	...	156	541	516	274	508	93	...
20	67	33	...	...	*40	173	590	488	271	496	100	...
21	60	30	...	...	*36	54	169	568	461	248	465	106
22	54	30	...	...	...	55	169	529	484	253	409	115
23	58	33	...	...	...	76	190	500	638	221	368	112
24	58	33	...	...	...	56	197	504	541	203	346	108
25	55	30	...	...	...	55	210	520	512	186	308	108
26	52	29	...	...	...	60	192	581	508	186	279	110
27	56	29	...	...	...	54	192	563	504	195	261	122
28	59	29	...	...	...	55	175	643	638	346	285	141
29	58	29	...	...	...	46	169	609	586	343	291	143
30	55	33	...	...	...	62	160	590	537	461	288	158
31	51	...	...	...	...	55	...	568	446	279	...	...
Total	1956	1141	1023	868	957	1333	3769	13382	16070	9717	14478	5263
Mean.	63.1	38.0	33	28	33	43.0	126	432	536	313	467	175
Max.	90	52	...	...	...	210	643	678	488	830	266	...
Min.	51	29	...	...	...	51	146	427	186	261	87	...
Acre-ft.	3880	2260	2030	1720	1900	2640	7480	26540	31870	19270	28710	10440

Total run-off for water year 1935-36=138,740 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of South Platte River at South Platte, Colorado, for Year Ending Sept. 30, 1935													
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1....	191	132	70	60	60	60	118	174	457	478	1460	403	
2....	195	134	.....	.....	.....	.....	118	182	449	457	1140	399
3....	195	122	.....	.....	.....	.....	118	162	449	433	828	364
4....	195	104	.....	.....	.....	.....	120	144	445	437	763	348
5....	187	100	.....	.....	.....	.....	114	136	461	445	646	316
6....	180	95	.....	.....	.....	.....	116	140	457	482	646	300
7....	178	98	.....	*60	.....	.....	108	146	475	491	656	300
8....	178	108	.....	.....	.....	.....	98	160	500	482	546	300
9....	182	112	.....	.....	.....	.....	96	209	550	469	612	300
10....	182	112	.....	.....	.....	.....	93	200	602	478	602	300
11....	180	104	*68	.....	.....	.....	87	193	697	499	457	300
12....	174	96	.....	.....	.....	.....	84	191	789	536	469	300
13....	164	110	.....	.....	.....	.....	86	200	828	546	491	302
14....	166	106	.....	.....	*58	.....	87	240	776	726	388	290
15....	168	104	.....	.....	.....	.....	98	348	720	703	368	229
16....	189	100	.....	.....	.....	.....	106	364	697	478	418	262
17....	176	104	.....	.....	.....	.....	110	429	546	449	508	250
18....	172	104	.....	.....	.....	.....	116	581	478	495	453	250
19....	164	102	.....	.....	.....	.....	128	445	465	624	414	240
20....	162	98	.....	.....	.....	.....	162	388	555	776	461	229
21....	150	95	.....	.....	.....	.....	191	368	576	789	399	294
22....	148	96	.....	.....	.....	106	202	453	550	802	403	254
23....	158	87	.....	.....	.....	96	160	565	541	1090	651	260
24....	162	98	.....	.....	.....	168	206	591	607	1360	618	275
25....	158	93	.....	.....	.....	176	209	586	629	940	679	300
26....	156	80	.....	.....	.....	118	140	550	571	691	651	300
27....	156	80	.....	.....	.....	96	134	560	474	504	624	330
28....	162	80	.....	.....	60	96	174	550	508	399	425	300
29....	138	80	.....	.....	.....	95	189	513	499	399	470	300
30....	132	80	.....	.....	.....	95	178	508	482	607	495	300
31....	128	.....	60	60	.....	98	.....	504	.....	1280	345	.....
Total	5226	3014	65	60	59	3946	10780	16380	19345	18086	8895
Mean.	169	100	65	60	59	80	132	348	561	624	583	296
Max.	195	134	209	591	828	1360	1460	403
Min.	128	80	84	136	445	399	345	229
Ac.-ft.	10370	5980	4000	3690	3280	4920	7830	21380	33390	38370	35870	17640

Total run-off for water year 1934-35=186,700 acre-feet.

Discharge of South Platte River at South Platte, Colorado, for Year Ending Sept. 30, 1936													
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1....	250	162	79	59	45	73	76	326	1220	1180	1480	630	
2....	250	167	40	57	46	66	54	342	1150	899	1680	545	
3....	250	160	44	55	47	63	82	377	1330	694	1560	587	
4....	250	153	49	53	42	94	83	435	1130	625	1110	598	
5....	250	134	61	56	45	81	75	486	1010	468	1240	439	
6....	250	140	68	56	41	77	53	515	857	435	1170	411	
7....	237	140	71	54	49	81	70	439	850	385	995	435	
8....	225	140	72	41	45	81	74	411	796	392	823	630	
9....	225	136	72	43	52	79	90	407	724	447	744	642	
10....	220	132	*56	*44	52	86	81	892	899	608	1170	700	
11....	220	124	41	45	54	65	91	878	770	545	1540	694	
12....	307	132	59	52	54	65	91	995	694	744	1640	676	
13....	224	138	82	59	58	74	110	988	647	1190	776	491	
14....	190	140	83	56	60	81	151	857	630	1160	1070	455	
15....	174	149	53	51	64	81	277	958	614	1020	1100	385	
16....	171	142	39	59	61	75	455	942	603	770	783	342	
17....	178	149	27	60	58	68	388	920	630	682	718	339	
18....	181	158	28	40	51	74	320	837	731	630	942	336	
19....	212	149	31	34	51	74	310	906	647	566	1180	332	
20....	217	147	34	39	54	72	352	1060	700	566	1280	310	
21....	207	130	39	42	*58	73	396	1090	676	652	1340	307	
22....	217	126	53	45	62	80	392	969	950	738	1170	316	
23....	265	128	54	50	70	67	427	995	1060	625	1050	320	
24....	250	126	56	53	76	58	415	920	1460	550	796	323	
25....	205	128	57	53	69	58	400	913	1750	431	455	329	
26....	200	162	65	53	51	56	468	1170	1690	491	496	316	
27....	207	151	64	46	62	56	468	1130	1280	525	625	304	
28....	210	142	66	45	62	54	427	1300	837	694	636	310	
29....	232	130	62	46	65	53	381	1520	823	928	647	304	
30....	224	105	57	45	53	53	363	1550	837	1610	535	381	
31....	190	.....	57	49	.....	50	.....	1570	.....	1020	652	.....
Total	6888	4220	1719	1540	1604	2168	7420	27098	27995	22270	31413	13187	
Mean.	222	141	55.5	49.7	65.3	69.9	247	874	933	718	1010	440
Max.	307	167	83	60	76	94	468	1570	1750	1610	1680	700
Min.	171	105	27	34	41	50	53	326	603	385	455	304
Ac.-ft.	13660	8370	3410	3050	3180	4300	14720	53750	55530	44170	62310	26160

Total run-off for water year 1935-36=292,600 acre-feet.

*Discharge measurement.

Discharge of South Platte River at Waterton, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	29	42	11	1	7	143	84	136	425	843	256
2	21	29	68	10	1	3	132	104	100	397	706	267
3	22	33	62	9	1	3	42	94	84	356	560	230
4	22	31	47	5	1	2	50	90	74	363	350	216
5	22	29	22	4	1	3	50	56	114	363	432	193
6	22	22	21	6	2	3	50	56	87	333	502	159
7	22	22	29	4	4	4	47	77	87	425	502	129
8	22	22	22	3	1	4	42	74	180	403	356	202
9	22	24	22	2	1	2	44	104	118	390	410	77
10	26	24	24	2	5	2	44	100	147	418	432	42
11	24	22	21	2	2	2	33	94	235	448	272	47
12	22	22	20	2	3	2	26	94	289	455	289	59
13	22	21	21	1	5	8	37	107	363	278	325	68
14	24	21	22	2	3	29	37	100	370	289	202	71
15	24	21	22	1	1	37	42	65	319	325	168	68
16	22	20	24	1	8	42	62	42	319	343	221	81
17	22	24	31	1	6	59	84	68	216	370	350	189
18	22	31	20	1	8	77	100	376	147	319	262	151
19	22	26	17	1	8	56	81	283	68	356	267	114
20	24	22	15	1	8	40	118	107	151	493	403	90
21	24	26	18	1	3	44	136	111	301	543	325	176
22	24	24	18	1	2	33	139	221	313	526	337	121
23	22	22	15	1	2	21	121	337	289	658	403	87
24	26	29	14	1	9	114	107	337	350	917	455	50
25	24	24	13	1	12	118	53	350	403	440	376	47
26	24	21	35	1	31	84	87	313	295	462	301	59
27	26	24	16	1	22	87	35	283	295	343	337	139
28	24	26	14	1	11	100	12	256	410	207	289	159
29	29	31	13	1	...	84	6	225	425	184	649	136
30	26	50	10	1	...	118	21	184	418	425	440	121
31	24	11	1	...	139	...	155	...	715	235	...	
Total	724	772	749	80	162	1327	1981	4947	7103	13019	11999	3804
Mean.	23.4	25.7	24.2	2.58	5.79	42.8	66	160	237	420	387	127
Max..	29	50	68	11	31	139	143	376	425	917	843	267
Min..	21	20	10	1	1	2	6	42	68	184	168	42
Acre-ft.	1440	1530	1490	159	321	2630	3930	9810	14090	25820	23800	7550

Total run-off for water year 1934-35=92,570 acre-feet.

Discharge of South Platte River at Waterton, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	82	22	45	4.0	3.2	.2	4.4	227	692	951	897	621
2	80	26	31	4.8	2.8	.2	3.3	215	603	754	1140	515
3	68	23	31	4.8	12	.2	3.3	185	790	559	1160	541
4	61	59	45	5.2	2.8	1.0	3.6	210	585	533	541	550
5	49	68	47	4.4	2.4	.6	6.0	251	427	363	834	403
6	49	61	47	4.8	2.4	.8	4.0	311	245	325	933	311
7	47	45	47	4.4	2.4	1.4	3.3	263	215	282	736	311
8	45	51	43	4.0	2.0	4.0	4.0	269	340	233	489	340
9	36	61	40	4.8	2.0	3.6	7.0	139	427	269	427	318
10	40	68	36	4.8	2.0	10	8.0	427	489	489	718	453
11	45	59	31	4.0	2.0	8.0	6.0	427	371	462	1060	471
12	59	88	27	5.2	2.0	5.6	9.0	489	275	603	1170	462
13	49	122	23	4.4	1.8	22	7.0	524	251	772	603	371
14	33	119	23	3.2	1.8	18	5.6	289	239	763	630	318
15	26	100	18	4.4	1.8	18	11.0	363	205	692	861	210
16	31	90	13	4.4	2.0	9	135	371	185	427	497	185
17	59	90	11	4.0	1.4	7	190	325	139	245	568	170
18	61	96	6	6.0	1.4	12	165	221	480	347	1350	161
19	96	93	4.4	6.0	1.4	18	175	289	541	304	951	180
20	88	96	2.8	4.4	1.6	13	190	489	621	289	999	148
21	78	88	1.8	3.2	1.6	17	251	594	583	363	999	152
22	78	82	1.6	3.2	1.8	16	263	453	826	568	817	180
23	75	78	1.6	2.4	2.0	78	275	480	888	419	799	156
24	47	72	1.8	2.4	2.0	85	269	453	1010	347	719	175
25	43	80	2.4	2.4	1.6	30	239	489	1300	205	436	190
26	42	131	2.4	3.2	1.6	22	297	1040	1200	269	480	190
27	42	119	2.8	3.6	1.8	11	263	799	870	304	621	170
28	31	112	2.8	4.0	1.2	6.0	227	754	445	594	665	251
29	26	68	3.2	5.2	0.6	4.4	210	1040	612	710	710	245
30	22	78	3.2	4.0	...	5.2	245	1050	710	1080	630	436
31	20	...	3.6	4.0	...	4.8	...	1050	471	639	...	
Total	1608	2345	598.4	129.6	65.4	432	3479.5	14486	16564	14992	24079	9184
Mean.	51.9	78.2	19.3	4.18	2.26	13.9	116	467	552	484	777	306
Max..	96	131	47	6	12	85	297	1050	1300	1080	1350	624
Min..	20	22	1.6	2.4	0.6	0.2	3.3	139	139	205	427	148
Acre-ft.	3190	4650	1190	257	130	857	6900	28730	32850	29740	47760	18220

Total run-off for water year 1935-36=174,474 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of South Platte River at Denver, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	66	56	90	38	31	52	59	176	860	290	824	306
2....	73	56	111	42	36	48	54	150	719	264	788	306
3....	78	64	111	38	36	42	52	157	640	234	508	259
4....	68	76	122	36	31	36	59	150	500	274	418	239
5....	59	78	102	36	31	40	73	122	450	254	323	224
6....	61	73	68	34	28	38	56	115	425	264	378	193
7....	61	76	61	36	31	34	50	111	411	296	384	234
8....	66	81	71	33	36	30	34	157	390	285	378	476
9....	64	87	61	33	56	30	54	153	300	274	317	259
10....	68	96	66	31	40	30	50	172	279	285	371	132
11....	78	87	66	30	40	31	42	157	678	306	323	111
12....	76	73	64	33	36	28	31	165	2270	397	285	108
13....	61	81	56	34	33	30	27	244	951	550	290	118
14....	50	81	54	33	27	36	44	274	657	285	279	132
15....	52	76	52	34	34	54	33	244	626	264	198	139
16....	46	81	52	34	34	73	38	198	540	306	161	139
17....	56	87	50	30	40	73	52	347	365	274	626	189
18....	66	108	46	28	44	84	66	1000	220	323	588	211
19....	66	99	44	30	44	90	61	1640	118	378	359	184
20....	71	87	48	23	50	73	56	886	139	371	328	118
21....	64	84	48	23	44	61	96	569	249	384	936	146
22....	54	81	48	27	38	71	105	812	285	607	411	211
23....	52	81	50	33	36	76	105	1750	274	636	359	108
24....	56	90	46	36	36	87	189	1490	301	764	873	87
25....	64	96	50	38	33	132	220	1650	378	559	636	68
26....	61	90	42	38	46	118	206	1460	296	540	432	84
27....	56	76	34	38	50	68	153	1360	198	425	347	202
28....	54	73	48	36	56	68	115	1280	323	312	359	142
29....	54	73	30	34	....	59	96	1380	347	259	404	139
30....	54	90	40	34	....	50	78	788	323	312	492	139
31....	54	....	36	33	....	48	....	2900	709	334	....	....
Total	1909	2437	1867	1036	1077	1790	2354	22057	14512	11681	13709	5403
Mean	61.6	81.2	60.2	33.4	38.5	57.7	78.5	712	484	377	442	180
Max...	78	108	122	42	56	132	220	2900	2270	764	936	476
Min...	46	56	30	23	27	28	27	111	118	234	161	68
Acre-ft.	3790	4830	3700	2050	2140	3550	4670	43750	28780	23170	27190	10720

Total run-off for water year 1934-35=158,340 acre-feet.

Discharge of South Platte River at Denver, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	139	108	97	62	32	62	55	259	975	795	629	598
2....	133	108	74	44	30	57	51	259	660	838	847	507
3....	136	105	68	59	28	59	59	232	795	598	1960	494
4....	136	105	68	48	27	66	68	232	717	548	1030	520
5....	126	153	74	57	32	64	76	264	576	424	1170	462
6....	113	136	71	48	30	62	81	326	436	342	1600	336
7....	108	139	71	35	27	59	68	462	357	302	1140	331
8....	105	126	71	35	25	55	71	534	331	292	838	331
9....	102	133	74	40	30	59	66	378	520	246	684	342
10....	91	139	71	48	40	68	57	391	1050	277	751	368
11....	66	129	66	57	53	76	41	668	668	481	1130	424
12....	66	143	64	59	54	88	41	636	507	554	1750	407
13....	74	157	66	53	58	97	42	636	407	629	1700	378
14....	86	153	66	57	56	44	41	527	347	693	734	326
15....	86	157	55	59	54	50	40	534	311	591	1040	232
16....	119	150	48	62	45	55	48	576	277	487	786	232
17....	126	146	53	57	33	60	105	541	259	292	606	232
18....	126	153	53	32	38	68	111	468	259	277	821	211
19....	129	153	51	38	40	76	246	442	598	331	1180	219
20....	150	143	51	40	43	70	228	548	644	342	1220	215
21....	157	136	53	46	44	64	259	668	636	342	1180	186
22....	164	116	59	51	76	62	297	660	734	455	1070	190
23....	207	113	53	55	88	60	306	548	956	407	838	211
24....	164	113	57	53	91	65	326	693	847	378	803	211
25....	150	111	59	44	71	75	282	606	938	277	576	215
26....	143	108	53	40	57	84	331	909	1170	268	449	272
27....	136	133	51	32	59	78	292	1040	956	326	507	272
28....	126	119	59	32	64	78	250	882	614	554	583	378
29....	113	116	51	35	64	78	254	975	520	856	583	468
30....	99	105	51	34	....	78	264	994	668	1400	576	468
31....	108	....	48	32	....	66	....	1070	....	865	534	....
Total	3784	3906	1906	1444	1389	2083	4456	17958	18733	15467	29315	10081
Mean	122	130	61.5	46.6	47.9	67.2	149	579	624	499	946	336
Max...	207	157	97	62	91	97	331	1070	1170	1400	1960	598
Min...	66	105	48	32	25	44	40	232	259	246	449	186
Acre-ft.	7510	7750	3780	2860	2760	4130	8840	35620	37160	30680	58150	20000

Total run-off for water year 1935-36=219,200 acre-feet.

TWENTY-EIGHTH BIENNIAL REPORT

Discharge of South Platte River at Henderson, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	51	32	112	40	44	47	8	99	872	485	760	336
2....	42	32	89	39	39	46	7	200	394	449	738	342
3....	44	39	62	37	37	42	7	138	496	629	498	336
4....	56	39	49	37	34	67	6	135	360	643	595	280
5....	62	51	47	40	64	58	8	118	248	511	479	252
6....	62	34	52	37	71	75	10	102	526	431	431	186
7....	62	33	69	33	64	47	6	97	582	413	431	313
8....	67	33	89	32	62	64	10	102	636	455	407	692
9....	60	42	89	32	85	62	37	123	643	467	353	608
10....	60	46	89	30	110	34	94	121	608	492	389	313
11....	49	54	77	29	77	22	33	112	805	485	348	218
12....	44	46	80	29	92	17	10	132	3680	664	258	173
13....	39	40	52	30	107	12	28	170	2980	1360	263	111
14....	44	40	49	30	89	14	51	274	1380	492	268	118
15....	46	39	49	52	75	21	52	294	1340	419	173	115
16....	42	37	52	54	73	58	46	255	828	371	140	86
17....	39	42	46	62	77	27	52	167	563	285	498	81
18....	42	49	46	62	87	12	67	1150	384	595	835	125
19....	47	47	37	80	97	20	69	2140	189	518	336	118
20....	46	60	46	75	94	33	62	1010	196	407	307	89
21....	33	54	42	80	92	20	73	452	420	511	708	73
22....	23	40	40	102	64	15	89	311	671	537	377	99
23....	24	36	39	80	42	21	75	888	629	657	290	92
24....	24	34	40	82	37	19	149	1100	615	622	544	60
25....	19	51	42	77	49	23	282	1080	550	492	775	67
26....	19	33	40	64	51	54	217	902	462	359	485	47
27....	28	73	40	62	47	33	196	700	383	285	413	140
28....	23	64	39	62	42	16	121	888	348	274	413	359
29....	24	62	46	52	...	12	97	1300	544	268	437	324
30....	32	71	49	54	...	9	126	865	544	419	582	296
31....	32	40	47	7	7	7	3050	768	425			
Total	1285	1353	1738	1622	1902	1007	2088	18475	22876	15763	13956	6449
Mean.	41.5	45.1	56.1	52.3	67.9	32.5	69.6	596	763	508	450	215
Max..	67	73	112	102	110	75	282	3050	3680	1360	835	692
Min..	19	32	37	29	34	7	6	97	189	268	140	47
Acre-ft.	2550	2680	3450	3220	3770	2000	4140	36640	45370	31270	27680	12790

Total run-off for water year 1934-35=175,560 acre-feet.

Discharge of South Platte River at Henderson, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	112	72	54	141	145	160	149	234	1230	734	656	517
2....	84	78	66	136	145	170	103	188	1040	784	955	435
3....	74	80	134	139	80	170	86	160	1050	575	3510	398
4....	70	105	152	139	50	94	107	157	955	505	2430	441
5....	88	114	126	147	45	94	70	248	776	452	1860	441
6....	96	114	126	144	44	88	70	344	344	335	2880	322
7....	94	109	136	141	44	92	82	603	276	377	1590	292
8....	90	105	131	141	37	88	80	693	373	354	974	318
9....	76	101	129	141	35	88	78	446	784	354	793	358
10....	63	92	131	147	36	94	76	368	1460	424	549	354
11....	59	88	131	157	38	88	70	373	700	596	685	393
12....	58	90	124	165	45	101	76	475	530	909	1170	398
13....	49	88	126	157	54	112	80	627	555	810	2070	363
14....	49	92	131	163	50	119	66	642	575	708	582	314
15....	48	86	121	149	42	126	63	642	430	589	589	268
16....	51	80	131	131	48	131	61	784	358	549	627	234
17....	157	76	129	141	43	129	72	900	382	419	575	238
18....	117	72	139	131	50	141	92	776	536	403	671	245
19....	109	70	129	129	55	171	99	486	802	446	1010	238
20....	105	66	114	134	60	136	131	620	890	403	1080	238
21....	109	68	117	141	54	131	210	725	900	363	1030	227
22....	124	66	117	149	63	141	227	717	837	424	1090	220
23....	165	68	121	152	75	200	230	613	1080	464	784	245
24....	174	70	129	152	98	185	241	671	1000	377	678	238
25....	160	70	131	141	110	134	194	627	1040	322	481	230
26....	168	74	124	129	130	141	309	863	1180	256	349	280
27....	154	68	129	131	160	147	288	1170	1120	322	368	358
28....	126	63	139	147	160	139	272	1240	828	784	505	542
29....	68	59	141	147	160	121	234	1230	656	946	542	964
30....	68	52	147	144	...	131	230	1200	828	974	530	458
31....	63	...	139	147	...	139	...	1320	708	486		
Total	3028	2436	3897	4153	2156	4001	4146	20142	23515	16666	32099	10567
Mean.	97.7	81.2	126	144	74.3	121	138	650	784	538	1040	352
Max..	174	114	152	165	160	200	309	1320	1460	974	3510	964
Min..	48	52	54	129	35	88	61	157	276	256	349	220
Acre-ft.	6010	4820	7730	8830	4280	7940	8220	39950	46640	33060	63670	20960

Total run-off for water year 1935-36=252,100 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of South Platte River at Fort Lupton, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	32	123	70	94	95	53	195	3090	408	684	426
2	31	34	120	73	79	95	52	248	912	352	727	403
3	31	36	97	71	77	87	52	242	434	443	644	386
4	32	34	91	66	74	112	57	234	536	590	617	336
5	41	48	90	73	104	103	52	244	400	480	431	274
6	49	40	87	71	111	120	44	234	362	420	306	207
7	49	31	91	69	104	92	40	232	382	391	311	178
8	52	22	105	67	102	109	42	228	380	369	325	596
9	61	23	105	69	125	107	40	254	393	397	274	830
10	57	31	111	66	150	79	84	264	393	369	278	487
11	45	44	105	62	116	67	66	268	417	408	302	306
12	40	41	95	64	136	62	35	264	800	531	197	232
13	32	34	90	61	154	57	26	268	878	1410	194	191
14	28	39	88	57	152	59	31	339	749	537	204	161
15	24	38	87	58	136	66	32	347	749	380	140	153
16	31	35	87	84	131	103	37	312	868	358	89	116
17	38	38	84	102	134	72	41	299	603	283	150	76
18	36	44	80	102	136	57	46	531	424	456	838	73
19	45	44	80	120	142	65	54	852	229	563	274	89
20	52	60	78	115	139	78	52	2180	236	380	204	81
21	39	62	77	120	134	65	61	1060	468	443	518	68
22	19	49	81	142	122	60	71	492	550	525	380	68
23	17	39	80	120	105	66	76	341	596	537	194	82
24	18	36	74	122	92	64	110	928	550	525	386	76
25	17	44	76	117	81	68	305	1140	437	550	898	68
26	18	43	76	104	96	99	244	1120	431	270	623	68
27	19	80	76	102	96	78	244	942	278	253	518	118
28	28	91	81	102	95	61	199	740	302	249	391	391
29	23	92	80	92	....	57	185	928	503	200	426	456
30	24	91	81	94	....	54	201	1340	456	211	590	364
31	32	....	76	87	....	52	....	905	....	499	518	....
Total	1060	1375	2752	2722	3217	2409	2632	17971	17808	13787	12631	7324
Mean	34.2	45.8	83.8	88.8	115	77.7	87.7	580	594	445	407	244
Max...	61	92	123	142	154	120	305	2180	3090	1410	898	830
Min...	17	22	74	57	74	52	26	195	229	200	89	68
Acre-ft.	2100	2730	5460	5400	6380	4780	5220	35640	35320	27350	25050	14530

Total run-off for water year 1934-35 = 170,000 acre-feet.

Discharge of South Platte River at Fort Lupton, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	286	100	92	185	164	200	164	274	1620	515	634	413
2	135	102	95	204	167	194	155	236	1310	627	860	376
3	98	112	173	194	92	194	140	200	1550	493	1990	315
4	90	128	244	188	48	132	143	140	1190	338	2640	356
5	92	175	244	182	64	80	140	197	1130	346	1730	376
6	130	173	225	191	60	71	112	338	527	247	2560	286
7	138	161	214	179	60	68	122	557	290	255	1930	232
8	130	158	214	179	50	71	128	880	370	255	1190	225
9	118	161	211	194	50	68	130	634	533	251	850	232
10	115	164	218	197	60	68	110	499	1670	278	678	236
11	92	164	207	207	60	56	83	440	970	408	588	270
12	78	164	211	222	70	53	80	493	588	662	670	303
13	61	170	204	218	80	61	120	634	504	685	2150	315
14	47	173	207	222	71	68	108	791	563	575	791	278
15	50	173	191	214	66	64	92	734	504	440	450	251
16	52	155	176	214	73	64	80	920	365	424	545	170
17	125	140	179	207	55	48	71	1070	324	342	510	161
18	161	122	179	179	64	48	98	1030	413	263	510	167
19	149	125	176	176	68	80	122	634	608	346	791	149
20	155	130	176	173	83	56	161	594	753	342	970	152
21	176	122	182	173	76	44	251	708	810	307	930	143
22	214	115	185	188	85	39	333	744	685	315	1020	138
23	255	102	179	194	98	105	303	634	820	386	724	146
24	270	105	179	207	138	232	338	670	753	282	545	164
25	236	108	182	200	105	161	307	715	800	259	419	173
26	211	105	170	173	179	115	376	662	940	197	278	225
27	211	105	167	167	191	167	419	1190	960	170	278	424
28	200	105	176	170	191	152	338	1470	692	450	386	614
29	120	92	197	167	191	140	294	1400	483	782	440	1130
30	78	78	173	164	....	138	240	1450	662	980	424	608
31	73	....	176	176	....	158	....	1600	....	648	376	....
Total	4346	3985	5802	5904	2759	3195	5558	22538	23387	12863	28857	9028
Mean	140	133	187	190	95.1	103	185	727	780	415	931	301
Max...	286	173	244	222	191	232	419	1600	1670	980	2640	1130
Min...	47	78	92	164	50	39	71	140	290	170	278	138
Acre-ft.	8620	7900	11510	11710	5470	6340	11020	44700	46390	25520	57240	17910

Total run-off for water year 1935-36 = 254,330 acre-feet.

TWENTY-EIGHTH BIENNIAL REPORT

Discharge of South Platte River Near Kersey, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	89	70	91	231	190	237	86	64	4120	94	102	330
2	84	70	150	223	188	240	75	59	2390	94	119	281
3	84	72	182	223	175	228	70	56	1360	93	115	202
4	84	74	192	218	168	223	68	58	1060	97	117	193
5	82	77	242	223	162	212	68	60	880	112	118	188
6	84	79	275	228	160	205	68	62	660	104	99	184
7	84	79	302	231	158	208	70	60	717	103	99	192
8	82	82	302	228	158	200	72	60	890	101	96	352
9	80	84	323	226	160	198	70	59	991	94	95	1660
10	79	84	335	215	180	198	67	62	1110	91	96	2180
11	77	87	341	188	192	198	68	64	1640	90	94	1140
12	79	89	341	180	178	195	68	68	2370	91	97	721
13	84	86	326	178	160	195	68	89	3940	118	104	506
14	100	86	314	175	152	190	70	91	2570	967	99	333
15	96	86	311	168	155	190	70	108	2940	228	101	279
16	87	86	308	158	158	185	67	116	3440	135	110	199
17	82	89	296	158	162	185	62	104	4210	121	116	162
18	79	91	257	162	175	185	54	167	1640	118	129	146
19	77	91	234	165	190	182	47	1100	564	116	164	134
20	74	91	220	175	202	182	42	3610	285	114	134	138
21	74	89	212	190	200	178	46	1780	195	111	132	141
22	74	89	212	210	195	150	36	1000	172	110	147	141
23	80	89	212	230	210	128	35	870	144	120	146	142
24	116	93	210	251	210	120	35	1650	142	113	155	136
25	100	93	200	251	208	116	67	1710	142	115	189	145
26	74	93	218	251	212	108	275	1440	130	112	232	150
27	72	110	231	254	218	98	275	1110	107	101	225	207
28	72	118	228	254	226	96	198	960	96	94	216	546
29	74	96	231	234	...	80	93	2160	93	98	221	1120
30	72	91	240	208	...	84	68	2390	92	100	237	1270
31	68	..	237	195	..	87	..	5700	..	99	301	..
Total	2543	2614	7773	6481	5102	5281	2458	26887	39090	4254	4405	13518
Mean.	82.0	87.1	251	209	182	170	81.9	867	1303	137	142	451
Max..	116	118	341	254	226	240	275	5700	4210	967	301	2180
Min...	68	70	91	158	152	80	35	56	92	90	94	134
Acre-ft.	5040	5180	15420	12850	10120	10470	4880	53330	77530	8440	8740	26810

Total run-off for water year 1934-35=238,800 acre-feet.

Discharge of South Platte River Near Kersey, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	625	405	476	476	448	503	471	61	1180	112	171	132
2	590	401	476	489	457	499	471	57	1200	110	143	127
3	494	405	462	476	439	499	485	55	908	114	218	132
4	448	444	494	457	430	503	489	55	1040	116	1370	127
5	361	503	522	462	430	462	494	54	1400	119	1880	129
6	330	522	580	462	430	418	489	51	1210	125	1500	132
7	315	535	580	453	420	401	457	54	620	127	1840	132
8	301	560	555	422	415	377	444	68	397	127	1460	138
9	290	585	545	405	480	373	457	389	276	127	855	132
10	287	595	540	418	530	361	435	373	730	127	575	127
11	276	585	531	457	550	326	431	263	1730	129	397	129
12	247	570	540	485	550	266	409	186	1410	136	235	127
13	241	560	540	499	480	263	369	141	1100	226	276	127
14	232	545	540	480	425	263	346	112	924	181	1000	132
15	229	540	535	466	415	263	334	159	840	155	389	129
16	223	540	517	480	380	256	308	152	766	157	176	129
17	270	531	489	489	326	256	244	682	150	157	136	136
18	308	531	494	471	297	259	235	418	615	148	155	134
19	361	522	489	428	301	259	218	250	462	145	152	132
20	385	512	485	414	315	266	218	97	377	123	173	134
21	397	512	480	422	369	273	199	68	319	118	294	136
22	431	512	489	462	422	266	164	64	283	108	373	132
23	471	499	489	489	471	266	108	66	223	108	480	127
24	503	485	489	508	517	346	138	64	159	108	480	127
25	540	485	489	526	517	439	85	67	148	108	312	123
26	560	489	489	503	448	462	73	64	121	108	223	263
27	522	494	489	476	499	431	71	82	116	116	207	381
28	526	499	489	462	526	448	68	760	116	114	226	526
29	503	499	499	462	512	457	70	878	114	118	199	848
30	431	489	494	409	...	471	67	964	112	127	168	1100
31	409	..	480	418	..	462	..	1080	..	273	141	..
Total	12106	15354	15766	14326	12799	11394	8853	7396	19578	4160	16225	6380
Mean.	391	512	509	462	441	368	295	239	653	134	523	213
Max...	625	595	580	526	550	503	494	1080	1730	273	1880	1100
Min...	223	401	462	405	297	256	67	51	112	108	141	123
Acre-ft.	24010	30450	31270	28420	25390	22600	17560	14670	38830	8250	32180	12650

Total run-off for water year 1935-36=286,300 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of South Platte River at Sublette, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	111	96	180	60	47	43	74	87	3630	148	138	134
2....	104	96	82	59	54	44	71	82	2080	136	145	132
3....	104	109	72	52	53	44	72	82	917	134	162	121
4....	107	127	72	50	50	43	72	84	520	130	177	150
5....	113	184	76	56	54	42	72	84	407	125	182	150
6....	122	193	76	56	55	41	74	79	336	132	194	158
7....	168	196	139	54	52	37	82	77	291	140	162	160
8....	190	196	118	55	52	35	86	80	263	142	138	212
9....	196	196	80	55	56	41	91	79	224	162	132	266
10....	196	203	72	52	56	41	107	77	203	191	117	377
11....	196	206	74	52	54	38	84	77	237	197	127	328
12....	200	206	72	54	59	39	51	80	420	212	130	237
13....	206	209	68	53	55	39	47	84	1160	197	130	191
14....	213	209	66	52	51	37	58	86	1500	266	134	180
15....	216	200	69	53	50	40	74	82	1020	402	130	174
16....	216	200	68	52	54	46	87	84	1370	280	130	165
17....	213	213	65	45	54	120	89	95	1680	243	134	155
18....	209	223	66	45	51	240	86	111	1360	227	140	148
19....	206	216	65	56	52	177	80	82	310	206	155	158
20....	203	136	56	62	52	193	76	864	200	200	168	185
21....	196	115	54	58	51	163	74	1280	162	160	165	194
22....	149	95	56	59	47	157	71	234	148	132	158	197
23....	87	91	56	59	51	154	72	152	142	132	160	194
24....	77	100	55	59	48	139	86	134	134	145	160	200
25....	118	107	56	59	96	124	89	221	142	142	160	191
26....	180	107	56	59	166	124	71	134	158	130	142	180
27....	109	157	54	55	89	107	69	142	160	125	130	200
28....	93	193	55	51	48	87	93	227	148	127	127	246
29....	102	223	59	53	....	86	102	621	145	127	123	218
30....	100	216	59	53	....	79	95	1450	148	130	125	263
31....	100	56	47	77	....	....	....	1720	134	132	....	....
Total	4800	5018	2252	1685	1657	2677	2355	8771	19615	5354	4507	5864
Mean...	155	167	72.6	54.4	59.2	86.4	78.5	283	654	173	145	195
Max...	216	223	180	62	166	240	107	1720	3630	402	194	377
Min...	77	91	54	45	47	35	47	77	134	125	117	121
Acre-ft.	9520	9950	4470	3340	3290	5310	4670	17400	38910	10620	8940	11630

Total run-off for water year 1934-35=128,000 acre-feet.

Discharge of South Platte River at Sublette, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	276	67	68	65	87	139	248	144	910	172	217	189
2....	282	70	65	58	151	131	177	135	1080	165	204	186
3....	199	68	72	54	189	137	158	133	1010	162	202	182
4....	167	67	76	61	135	137	153	126	902	167	235	179
5....	153	70	67	58	133	129	151	129	1010	182	279	177
6....	135	72	65	51	133	137	142	129	1160	184	196	158
7....	124	65	70	51	151	146	139	131	555	189	273	158
8....	122	67	67	51	167	144	170	137	282	192	575	158
9....	122	70	64	47	153	139	232	144	240	192	246	160
10....	116	89	70	43	155	142	308	112	189	196	251	155
11....	112	126	70	51	186	139	340	133	243	206	243	133
12....	112	137	61	48	165	137	351	144	466	209	302	122
13....	110	144	59	46	126	196	337	182	251	186	210	114
14....	104	124	59	49	120	276	330	170	133	212	408	112
15....	106	116	59	51	162	323	327	158	122	189	740	139
16....	106	118	58	46	153	330	308	179	287	170	358	146
17....	110	114	59	44	126	334	290	177	500	158	259	142
18....	118	106	62	49	120	347	279	222	570	153	230	142
19....	131	106	59	48	122	347	273	290	505	151	214	155
20....	179	108	56	46	124	354	262	238	408	155	204	167
21....	162	102	61	49	137	362	254	174	373	148	214	174
22....	104	100	59	51	155	347	243	148	323	142	276	177
23....	98	94	54	47	179	293	217	139	293	135	296	177
24....	91	80	58	43	160	189	192	135	246	133	302	170
25....	85	72	59	49	148	148	199	137	217	126	246	167
26....	89	70	54	49	146	133	186	142	192	120	179	179
27....	85	72	51	47	139	120	177	142	174	129	165	279
28....	76	67	59	49	137	122	177	199	172	137	158	373
29....	76	65	58	56	139	179	186	189	179	142	158	611
30....	73	68	55	49	....	243	182	617	174	151	153	950
31....	68	59	67	....	284	....	728	....	151	189	....	....
Total	3891	2694	1913	1573	4198	6384	6988	5963	13166	5104	8242	6331
Mean...	126	89.8	61.7	50.7	145	212	233	192	439	165	266	211
Max...	282	144	76	67	189	362	351	728	1160	212	740	950
Min...	68	65	51	43	87	120	139	112	122	120	153	112
Acre-ft.	7720	5340	3790	3120	8330	13060	13860	11830	26110	10120	16350	12560

Total run-off for water year 1935-36=132,190 acre-feet.

Discharge of South Platte River at Balzac, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	174	144	22	16	18	14	120	100	...	81	38	195
2....	170	192	30	12	20	16	174	79	...	84	69	229
3....	151	192	73	10	21	17	188	75	...	91	84	261
4....	124	214	50	10	21	18	192	71	...	84	84	157
5....	151	111	54	11	21	17	174	73	...	74	101	98
6....	147	62	22	11	22	18	174	60	...	76	98	160
7....	48	60	18	9	20	15	163	58	...	109	86	946
8....	47	58	19	9	20	15	155	64	...	109	69	464
9....	50	68	18	8	22	16	159	58	...	109	47	292
10....	50	56	18	6	20	16	114	54	...	129	98	218
11....	48	102	17	6	19	17	29	45	...	148	118	86
12....	47	147	16	10	18	16	21	363	...	154	112	69
13....	68	144	15	13	17	16	71	29	...	179	101	123
14....	170	117	15	12	15	16	151	27	...	160	101	112
15....	124	56	17	12	15	17	244	24	...	141	98	186
16....	36	50	17	12	16	18	188	22	...	141	88	176
17....	43	50	19	12	16	17	174	24	...	154	71	126
18....	62	54	24	13	14	15	155	27	...	160	91	107
19....	111	50	25	16	13	15	140	809	...	166	121	98
20....	97	52	24	21	12	15	136	3610	...	129	121	86
21....	75	52	24	24	12	12	124	1860	792	88	123	94
22....	50	77	25	25	12	14	117	1680	556	91	123	94
23....	25	75	27	25	14	18	111	990	225	96	115	101
24....	22	62	27	22	17	30	174	...	182	112	112	104
25....	20	43	27	16	18	32	229	...	144	74	115	94
26....	20	34	27	13	20	29	32	...	123	60	218	94
27....	32	32	24	11	18	32	30	...	115	45	205	144
28....	87	29	21	12	14	56	58	...	109	24	215	176
29....	111	22	20	16	...	73	155	...	86	32	316	179
30....	111	21	18	18	...	79	124	...	129	36	277	176
31....	111	...	18	17	...	79	...	...	47	...	208	...
Total	2582	2426	771	428	485	778	4076	...	...	3183	3823	5445
Mean.	83.3	80.9	24.9	13.8	17.3	25.1	136	...	...	103	123	181
Max..	174	214	73	25	22	79	244	...	...	179	316	946
Min..	20	21	15	6	12	12	21	...	...	24	38	69
Acre-ft.	5120	4810	1530	849	962	1540	8080	45000	215000	6310	7580	10800

Total run-off for water year 1934-35=307,580 acre-feet.

Discharge of South Platte River at Balzac, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	182	12	9.8	9.4	16	13	19	201	144	133	347	158
2....	185	11	9.4	8.6	12	12	16	201	198	128	242	175
3....	188	10	9.4	7.8	11	12	12	192	235	128	323	189
4....	174	10	9.4	7.8	12	12	11	192	266	128	660	195
5....	159	10	9.0	6.2	13	12	11	186	280	128	1360	201
6....	158	10	9.0	4.6	14	12	9.8	172	307	128	578	186
7....	158	10	8.2	5.8	12	13	27	163	252	89	424	210
8....	156	11	7.4	7.4	13	13	68	183	210	76	256	175
9....	162	11	7.4	7.8	13	12	96	133	177	87	201	175
10....	179	11	7.8	8.6	15	12	152	28	116	98	232	169
11....	181	12	8.2	9.0	15	11	139	46	73	116	150	183
12....	123	13	8.2	9.0	14	11	131	144	53	152	121	189
13....	71	14	9.0	7.8	14	9.8	133	150	55	152	123	175
14....	54	15	9.8	8.2	13	11	102	142	52	150	139	177
15....	48	15	10	8.2	12	10	94	144	51	177	139	177
16....	43	14	11	7.4	14	11	89	158	91	177	161	175
17....	39	13	11	7.8	14	11	85	186	116	163	147	186
18....	35	13	11	9.8	15	12	85	175	102	152	169	186
19....	34	12	11	18	16	11	91	169	139	152	207	175
20....	33	12	10	16	16	10	111	155	155	150	229	169
21....	39	11	9.0	22	17	11	116	142	175	155	219	161
22....	38	12	9.0	13	19	23	144	133	219	158	351	175
23....	36	12	9.4	13	25	43	147	144	232	155	315	177
24....	36	11	9.4	13	21	15	155	142	223	144	276	169
25....	36	11	9.8	13	20	13	172	150	198	144	252	163
26....	29	11	10	12	15	14	186	158	183	142	207	166
27....	16	10	9.0	13	13	12	216	169	177	150	150	192
28....	15	10	10	13	13	12	195	172	161	144	150	226
29....	14	9.8	9.4	16	15	14	207	163	150	172	155	339
30....	14	9.8	9.0	15	...	12	204	147	144	442	163	331
31....	12	...	9.0	15	...	12	...	152	...	1360	166	...
Total	2647	346.6	289.0	333.2	432	411.8	3223.8	4792	4934	5830	8612	5724
Mean.	85.4	11.6	9.32	10.7	14.9	13.3	107	155	164	190	278	191
Max..	188	15	11	22	25	43	216	201	307	1360	1360	339
Min..	12	9.8	7.4	4.6	11	9.8	9.8	28	51	76	121	158
Acre-ft.	5250	687	573	661	857	817	6390	9500	9790	11560	17080	11350

Total run-off for water year 1935-36=74,520 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of South Platte River at Julesburg, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	32	44	81	210	138	285	36	125	6811	144	25	27
2....	32	45	89	198	126	296	35	119	23950	122	24	27
3....	32	45	96	192	120	266	45	118	15890	107	24	26
4....	31	45	123	213	105	214	38	121	7510	114	24	27
5....	31	42	131	226	90	224	36	117	4575	95	24	26
6....	31	42	152	241	74	246	40	104	3322	87	22	26
7....	31	43	164	249	68	241	48	85	2576	82	22	29
8....	38	42	181	239	63	202	43	86	2128	77	22	34
9....	40	45	197	215	61	221	34	80	1766	74	27	36
10....	46	48	185	194	56	124	45	70	1480	74	26	34
11....	49	48	180	179	55	104	56	64	1300	69	27	33
12....	51	46	156	156	56	86	40	63	1208	66	26	57
13....	51	44	141	139	54	77	35	109	1769	61	21	82
14....	52	48	129	131	57	67	34	155	4172	58	20	91
15....	54	49	124	130	60	63	33	188	2014	54	20	94
16....	57	48	120	132	62	60	30	239	1957	51	21	89
17....	56	45	117	122	108	61	30	321	1969	44	23	59
18....	56	47	117	121	108	56	30	389	1487	43	23	50
19....	56	48	109	78	95	54	31	520	1536	39	24	46
20....	55	45	109	67	79	54	37	710	2095	39	25	45
21....	49	44	112	77	67	55	36	864	2036	37	28	41
22....	50	44	118	82	76	51	41	1538	1409	38	27	41
23....	56	44	109	103	66	50	35	2242	1095	36	40	40
24....	68	43	104	105	59	49	63	1679	844	34	38	41
25....	49	46	107	127	56	49	106	1437	681	33	30	41
26....	50	49	99	130	53	46	136	1033	497	31	26	42
27....	46	47	95	200	68	42	155	813	373	31	25	46
28....	44	50	99	213	123	41	146	792	288	30	25	46
29....	42	55	120	182	....	41	136	1500	214	30	25	47
30....	41	77	163	151	....	38	127	4854	174	27	24	62
31....	41	....	198	145	....	35	....	3310	....	27	24	....
Total	1417	1408	4025	4947	2208	3498	1737	23845	97126	1854	782	1385
Mean.	45.7	46.9	130	160	78.9	113	57.9	769	3238	59.8	25.2	46.2
Max...	68	77	198	249	138	296	155	4854	23950	144	40	94
Min...	31	42	81	67	54	35	30	63	174	27	20	26
Acre-ft.	2810	2790	7980	9810	4380	6940	3450	47300	192600	3680	1550	2750

Total run-off for water year 1934-35=286,040 acre-feet.

Discharge of South Platte River at Julesburg, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	81	83	93	286	302	397	78	41	44	24	25	32
2....	96	80	97	289	284	357	82	42	52	23	23	32
3....	99	81	99	292	267	339	129	40	96	22	25	32
4....	91	98	100	292	261	316	180	39	91	22	29	38
5....	89	110	131	298	272	275	163	40	93	20	112	40
6....	89	112	162	257	277	214	164	39	80	21	220	43
7....	88	108	205	184	276	175	145	39	76	20	342	44
8....	89	103	214	156	266	155	110	49	73	19	281	44
9....	90	100	224	160	272	137	97	79	100	19	192	41
10....	94	98	237	189	292	120	77	76	108	18	127	41
11....	98	95	247	253	289	105	64	71	79	18	89	39
12....	98	94	263	284	303	98	50	68	72	18	67	36
13....	93	93	266	311	300	94	55	61	69	18	54	36
14....	87	103	271	306	308	88	53	59	62	19	43	35
15....	73	105	272	313	311	84	53	55	58	19	39	36
16....	67	102	286	308	318	82	48	46	54	18	34	36
17....	61	98	296	290	320	78	43	46	52	18	33	36
18....	59	94	286	131	318	73	44	46	49	17	32	37
19....	68	84	292	177	320	78	46	46	45	18	31	34
20....	76	90	289	195	318	83	45	45	36	18	32	34
21....	77	95	294	238	320	73	37	45	39	19	47	32
22....	75	98	280	296	325	66	36	48	41	19	36	32
23....	73	98	283	371	345	64	36	42	30	18	35	31
24....	73	98	282	348	377	72	36	41	28	19	34	31
25....	74	99	295	326	450	125	35	40	28	21	34	30
26....	75	99	281	308	470	107	38	38	28	20	33	30
27....	77	101	270	301	443	119	39	39	27	20	32	30
28....	77	99	277	300	428	106	38	43	25	20	32	30
29....	77	95	291	304	480	102	39	52	25	21	32	34
30....	78	92	298	292	....	88	42	43	24	28	32	33
31....	82	....	306	299	....	74	42	42	26	32	....	....
Total	2524	2905	7487	8354	9512	4344	2102	1500	1684	620	2209	1059
Mean.	81.4	96.8	242	269	328	140	70.1	48.4	56.1	20.0	71.3	35.3
Max...	99	112	306	371	480	397	180	79	108	28	342	44
Min...	59	80	93	131	261	64	35	38	24	17	23	30
Acre-ft.	5010	5760	14850	16570	18870	8620	4170	2980	3340	1230	4380	2100

Total run-off for water year 1935-36=87,880 acre-feet.

Discharge of Tarryall Creek Near Lake George, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	14	9	...	...	...	...	24	8	33	14	291	44
2....	14	8	...	...	...	...	23	6	29	11	95	54
3....	14	9	...	...	...	...	24	6	26	14	85	63
4....	13	10	...	...	...	...	24	6	23	15	69	47
5....	14	8	...	...	...	...	24	5	22	60	60	46
6....	10	9	...	...	...	...	24	4	20	91	64	38
7....	10	9	...	...	...	...	24	4	20	79	58	39
8....	10	11	...	...	...	...	23	5	18	67	57	48
9....	10	12	...	...	...	...	22	6	18	51	70	56
10....	9	14	...	...	...	...	18	9	16	41	78	59
11....	8	14	...	...	...	...	18	10	18	45	70	63
12....	8	13	...	...	...	...	14	10	24	84	66	54
13....	10	13	...	...	...	...	12	16	30	118	61	36
14....	11	14	...	...	...	...	11	28	50	111	60	32
15....	12	11	...	...	...	...	14	47	62	65	55	28
16....	14	11	...	...	...	...	16	72	75	40	51	30
17....	16	12	...	...	...	...	17	78	72	35	54	28
18....	16	12	...	...	...	...	24	72	58	42	51	29
19....	17	9	...	...	...	...	24	65	57	85	51	26
20....	20	9	...	...	...	...	22	53	40	111	60	25
21....	17	14	...	...	...	...	21	47	33	104	51	24
22....	14	9	...	...	...	...	22	46	24	134	48	24
23....	14	10	...	...	...	...	22	43	20	219	54	22
24....	14	13	...	...	...	...	25	41	14	128	99	20
25....	14	10	...	...	...	...	26	40	14	81	67	20
26....	11	10	...	...	...	...	24	40	20	51	64	20
27....	11	10	...	...	...	49	18	40	18	41	69	24
28....	12	10	...	...	...	69	14	41	16	35	76	31
29....	11	10	...	...	...	44	11	45	20	35	83	35
30....	10	10	...	...	...	41	9	37	18	91	59	31
31....	10	...	...	...	...	25	...	33	...	514	50	
Total	388	323	...	...	...	228	594	963	908	2615	2226	1096
Mean.	12.5	10.8	...	...	...	Mar. 27	19.8	31.1	30.3	84.4	71.8	36.5
Max...	20	14	...	...	...	to 31	26	78	75	514	291	63
Min...	8	8	...	...	...	...	9	4	14	11	48	20
Acre-ft.	770	641	...	...	...	452	1180	1910	1800	5190	4420	2170

Total run-off for period=18,533 acre-feet.

Discharge of Tarryall Creek Near Lake George, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	39	26	...	...	...	...	23	29	283	108	622	89
2....	39	24	...	...	...	...	33	20	256	110	526	81
3....	35	24	...	...	...	...	33	13	198	78	336	80
4....	31	25	...	...	...	...	29	11	219	53	365	60
5....	23	36	...	...	...	...	24	6.9	210	46	427	26
6....	28	26	...	...	...	...	24	5.8	153	37	474	53
7....	24	28	...	...	...	...	27	18	136	35	592	51
8....	26	29	...	...	...	...	22	45	92	49	568	61
9....	24	26	...	...	...	...	20	107	70	206	451	54
10....	23	22	...	...	...	...	23	132	78	139	322	44
11....	23	29	...	...	...	...	26	114	319	142	266	38
12....	22	28	...	...	...	...	29	162	371	96	306	64
13....	22	28	...	...	...	...	50	51	180	202	308	52
14....	22	28	...	...	...	...	163	50	132	77	217	52
15....	21	28	...	...	...	...	132	47	100	79	136	44
16....	19	28	...	...	...	...	37	43	84	57	172	44
17....	16	28	...	...	...	...	75	37	81	35	182	41
18....	20	23	...	...	...	*27	75	37	70	34	178	31
19....	24	26	...	...	...	...	77	39	38	34	170	33
20....	29	31	...	...	...	...	78	49	75	34	187	38
21....	27	26	...	...	...	...	83	76	88	44	281	26
22....	32	24	...	...	...	...	80	89	104	46	260	55
23....	30	22	...	...	...	...	65	88	266	45	140	38
24....	30	25	...	...	...	...	57	107	403	44	53	33
25....	30	22	...	...	...	...	53	168	342	45	60	29
26....	29	24	...	...	...	...	49	156	170	48	84	26
27....	29	24	...	...	...	...	41	210	147	49	85	28
28....	26	28	...	...	...	...	39	266	92	57	89	37
29....	29	28	...	...	...	27	40	379	93	110	92	41
30....	26	29	...	...	...	26	35	258	94	273	92	57
31....	28	...	...	...	...	26	...	217	...	430	94	...
Total	826	795	...	...	...	...	1597	3030.7	4944	2842	8135	1406
Mean.	26.6	26.5	...	...	...	...	53.2	97.8	165	91.7	262	46.9
Max...	39	36	...	...	...	...	168	379	403	430	622	89
Min...	16	22	...	...	...	...	20	5.8	38	34	53	26
Acre-ft.	1640	1580	...	...	...	...	3170	6010	9810	5640	16140	2790

Total run-off for period=46,780 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Goose Creek Above Lake Cheesman, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	11	10	....	....	....	....	15	23	103	37	53	30
2....	10	10	....	....	....	....	12	21	100	35	43	27
3....	10	11	....	....	....	....	14	20	96	42	40	22
4....	10	9	....	....	....	....	14	16	94	39	39	21
5....	10	10	....	....	....	....	15	14	91	33	44	19
6....	10	11	....	....	....	....	14	18	91	30	52	18
7....	10	11	....	....	....	....	14	22	90	34	46	20
8....	10	11	....	....	....	....	11	24	88	36	42	58
9....	10	12	....	....	....	....	11	30	84	34	52	53
10....	10	12	....	....	....	....	10	30	84	36	42	36
11....	10	11	....	....	....	....	10	28	87	36	37	30
12....	11	11	....	....	....	....	11	24	91	50	38	27
13....	10	11	....	....	....	....	12	29	126	54	33	25
14....	10	11	....	....	....	....	18	38	99	37	30	23
15....	10	11	....	....	....	....	22	50	85	55	27	23
16....	9	11	....	....	....	....	21	59	81	38	28	23
17....	10	14	....	....	....	....	18	75	82	32	54	22
18....	9	11	....	....	....	....	16	97	76	50	42	21
19....	9	12	....	....	....	....	12	76	70	46	32	21
20....	9	12	....	....	....	....	15	70	66	40	30	20
21....	10	12	....	....	....	....	17	67	63	44	26	20
22....	9	11	....	....	....	....	24	80	60	75	25	20
23....	9	11	....	....	....	....	8	26	99	55	35	20
24....	9	13	....	....	....	....	8	23	126	53	38	20
25....	9	14	....	....	....	....	8	16	137	49	33	20
26....	10	14	....	....	....	....	8	11	135	48	31	23
27....	9	14	....	....	....	....	10	18	129	46	29	27
28....	10	12	....	....	....	....	11	18	117	46	27	34
29....	10	10	....	....	....	....	11	23	115	46	30	32
30....	10	7	....	....	....	....	12	32	113	42	65	30
31....	10	....	....	....	....	....	15	....	113	....	58	31
Total	303	340	....	....	....	....	91	493	1995	2292	1277	1191
Mean.	9.77	11.3	....	....	....	....	Mar. 23	16.4	64.4	76.4	41.2	38.4
Max..	11	14	....	....	....	....	to 31	32	137	126	75	54
Min..	9	7	....	....	....	....	....	10	14	42	27	25
Acre-ft.	601	674	....	....	....	....	180	978	3960	4550	2530	2360
												1530

Total run-off for period = 17,363 acre-feet.

Discharge of Goose Creek Above Lake Cheesman, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	22	14	5	3	3	6	8.2	23	52	42	55	44
2....	22	15	5	3	3	6	11	21	48	40	67	40
3....	21	15	5	3	4	6	11	24	55	36	47	42
4....	21	14	5	3	5	6	8.6	27	63	36	63	44
5....	21	12	5	2	4	7	7.6	25	51	37	79	38
6....	21	16	5	2	5	7	7.4	26	46	34	143	34
7....	21	13	6	3	3	8	8.4	22	45	33	125	33
8....	21	14	5	3	3	9	8.8	20	41	33	94	32
9....	21	14	5	3	3	9	9.0	18	40	34	84	29
10....	21	15	6	3	3	15	9.0	25	56	39	80	29
11....	20	14	6	3	3	15	9.9	35	67	38	78	32
12....	20	15	6	3	3	15	13	71	57	63	74	30
13....	20	15	6	3	3	8	21	83	45	45	71	28
14....	20	16	5	3	3	7	32	87	40	34	67	25
15....	20	16	4	3	3	9	48	80	39	26	64	24
16....	20	15	4	3	3	9.6	58	76	39	26	61	24
17....	22	15	4	3	3	9.6	51	67	37	29	66	23
18....	22	15	4	3	3	9.6	51	62	34	30	63	23
19....	27	15	3	3	3	9.6	34	58	34	36	127	23
20....	26	14	3	3	3	9.6	47	54	37	31	82	23
21....	23	14	3	3	3	8.8	38	50	39	26	79	23
22....	21	14	3	3	3	8.6	42	46	44	28	64	22
23....	20	13	3	3	5	7.6	54	46	99	24	60	22
24....	19	12	3	3	5	6.8	54	57	59	22	56	22
25....	17	12	3	3	5	7.0	50	53	52	21	52	21
26....	16	12	3	3	8	6.8	36	50	54	21	50	21
27....	17	10	3	3	5	5.8	34	48	50	21	47	26
28....	17	8	3	3	5	7.0	29	66	46	48	58	27
29....	18	7	3	3	3	8.0	29	73	43	49	54	28
30....	19	6	3	3	....	8.6	26	55	50	66	52	39
31....	16	....	3	3	....	8.0	....	60	72	47	....	....
Total	632	400	130	91	108	264.0	845.9	1508	1462	1120	2209	871
Mean.	20.4	13.3	4.19	2.93	3.72	8.52	28.2	48.6	48.7	36.1	71.2	29.0
Max..	27	16	6	3	8	15	58	87	99	72	143	44
Min..	16	6	3	2	3	5.8	7.4	18	34	21	47	21
Acre-ft.	1250	793	258	180	214	524	1680	2990	2900	2220	4380	1730

Total run-off for water year 1935-36 = 19,120 acre-feet.

Discharge of Bear Creek at Morrison, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1....	9	9	*9	....	15	6	9	26	191	59	82	37
2....	9	9	....	11	9	9	24	180	55	66	36	36
3....	12	6	....	9	6	9	22	158	66	94	30	30
4....	12	10	....	9	6	9	16	142	70	88	36	36
5....	12	9	....	9	6	7	15	142	63	66	37	37
6....	11	10	....	9	9	9	16	138	57	55	45	52
7....	11	10	....	8	15	8	16	147	55	48	45	52
8....	10	8	....	7	9	9	20	138	57	45	45	77
9....	9	8	....	9	3	12	27	129	63	46	73	73
10....	9	8	....	9	3	13	27	180	68	43	63	63
11....	10	6	....	8	3	11	26	215	76	40	61	61
12....	11	7	....	8	4	11	27	147	196	42	53	53
13....	11	7	....	8	9	10	42	138	52	37	44	44
14....	11	7	....	8	10	18	50	185	35	34	40	40
15....	12	6	*12	7	14	9	68	153	45	34	42	42	
16....	12	8	....	7	9	18	73	147	34	35	40	40
17....	10	9	....	7	9	22	85	113	25	100	41	41
18....	11	9	....	6	9	21	268	91	100	59	37	37
19....	13	10	....	6	9	16	228	91	88	35	31	31
20....	8	10	....	4	8	19	158	94	121	45	27	27
21....	6	11	....	7	6	15	142	100	85	43	14	14
22....	6	11	....	6	7	9	234	97	79	38	10	10
23....	7	12	....	6	5	10	268	88	73	79	12	12
24....	9	18	....	6	3	21	305	85	59	33	15	15
25....	8	19	....	5	4	19	290	73	59	26	17	17
26....	8	20	....	5	5	17	260	68	55	28	22	22
27....	7	16	....	5	9	20	234	68	46	31	20	20
28....	7	14	....	6	7	21	215	76	45	32	31	31
29....	8	12	....	6	6	21	228	68	46	37	30	30
30....	8	10	*13	....	9	27	241	63	76	40	28	28
31....	8	....	....	....	7	....	222	....	85	42	....	....
Total	295	309	....	210	224	429	3573	3705	2093	1523	1092	1092
Mean.	9.52	10.3	10	12	7.50	7.23	14.3	125	124	67.5	49.1	36.4	36.4
Max.	13	20	15	15	27	305	215	196	100	77	77	77
Min.	6	6	4	3	7	15	63	25	26	10	10	10
Acre-ft.	585	613	615	738	417	444	851	7680	7350	4150	3020	2170	2170

Total run-off for water year 1934-35=28,630 acre-feet.

Discharge of Bear Creek at Morrison, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	25	18	11	6	6.0	18	17	25	160	88	160	77
2....	25	23	15	6	6.0	18	19	26	156	83	195	72
3....	26	21	9.2	6	6.0	20	20	33	156	81	243	70
4....	25	17	10	6	6.0	22	25	42	149	83	370	68
5....	11	21	15	6	6.0	22	20	45	143	86	348	60
6....	3.6	25	15	6	7.0	23	19	54	143	90	394	58
7....	3.7	28	14	6	7.0	23	21	58	146	81	394	56
8....	4.0	28	15	6	8.4	26	31	52	156	56	322	52
9....	4.2	31	10	6	24	28	31	44	186	64	254	50
10....	9.2	33	13	6	38	33	31	77	277	75	195	47
11....	17	16	8.4	6	48	27	35	86	322	70	164	52
12....	17	27	7.6	6	27	28	37	130	204	68	182	48
13....	6.4	26	9.2	6	22	30	26	168	149	75	164	47
14....	8.0	50	11	6	22	35	35	195	143	79	156	42
15....	6.8	34	12	6	24	35	30	213	136	81	153	41
16....	9.6	14	18	6	28	37	27	237	136	70	123	38
17....	22	33	7.6	6	18	33	25	254	133	66	136	37
18....	32	52	7.2	6	27	31	24	213	133	66	146	35
19....	32	68	7.0	6	64	31	34	218	133	70	143	35
20....	28	15	*7.0	6	101	26	34	218	139	77	143	34
21....	27	30	6.5	6	81	22	30	218	139	86	136	32
22....	25	16	6.5	6	42	16	31	213	136	93	123	31
23....	23	10	6.5	6	31	27	35	213	171	90	104	30
24....	23	16	6.5	6	20	17	38	204	146	68	90	26
25....	23	17	6.5	6	38	22	38	204	149	50	77	27
26....	22	30	6.5	6	34	21	41	222	146	47	70	30
27....	13	9.2	6.0	6	24	14	35	222	106	75	88	37
28....	17	6.0	6.0	*6	23	14	31	218	106	160	106	45
29....	16	6.8	6.0	6	22	16	33	156	112	182	95	48
30....	15	4.0	6.0	6	6	21	31	168	104	213	79	48
31....	15	....	6.0	6	....	17	....	164	171	86	....	....
Total	534.5	725.0	291.2	186	810.4	753	884	4620	4615	2744	5439	1373
Mean.	17.2	24.2	9.39	6.0	27.9	24.3	29.5	149	154	88.5	175	45.8
Max.	32	68	18	6	101	37	41	254	322	213	394	77
Min.	3.6	4.0	6.0	6	6.0	14	17	25	104	47	70	26
Acre-ft.	1060	1440	578	369	1610	1490	1750	9160	9150	5440	10790	2720

Total run-off for water year 1935-36=45,557 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

**Discharge of Bear Creek at Mouth at Sheridan Junction, Colorado, for Year
Ending Sept. 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	4	7	11	10	9	6	2	5	36	6	4	12
2....	4	8	11	9	10	7	1	7	26	5	4	12
3....	5	9	11	9	9	7	1	6	40	8	3	12
4....	5	8	10	9	9	7	1	6	53	11	21	12
5....	4	8	10	9	7	7	1	6	48	9	7	11
6....	4	8	10	9	8	7	1	6	34	10	5	9
7....	4	10	10	9	8	6	1	3	63	12	4	13
8....	4	8	10	9	9	6	1	4	66	13	4	24
9....	4	10	11	9	11	6	2	3	59	14	4	26
10....	4	10	11	8	10	6	3	6	60	20	4	17
11....	5	9	11	8	9	6	2	3	62	18	4	13
12....	5	9	11	8	9	6	2	4	109	29	5	12
13....	5	8	11	8	9	6	1	5	147	65	5	12
14....	5	8	11	9	7	4	1	9	57	12	4	12
15....	5	7	11	8	11	5	1	31	38	11	4	12
16....	5	8	11	8	9	6	1	36	46	11	5	11
17....	6	9	11	8	8	6	1	31	29	15	19	10
18....	5	10	11	8	8	6	1	194	24	19	19	10
19....	4	9	12	8	10	6	1	166	19	15	14	10
20....	5	8	11	9	8	5	2	110	19	8	15	10
21....	5	10	10	11	6	4	3	82	14	10	14	10
22....	5	10	11	10	6	4	1	158	15	12	13	9
23....	4	9	11	9	7	4	1	231	15	11	17	9
24....	5	10	10	9	8	5	6	204	15	9	36	9
25....	5	9	10	9	7	5	8	184	15	8	26	10
26....	5	9	9	9	7	5	9	144	10	7	15	11
27....	6	14	9	9	7	4	13	101	10	7	12	13
28....	6	12	9	9	6	3	11	87	10	7	12	13
29....	6	12	10	8	....	3	11	103	10	7	11	12
30....	6	11	10	8	....	4	7	66	7	5	10	10
31....	7	....	10	8	....	4	....	60	....	5	10	....
Total	152	277	325	271	232	166	100	2058	1156	403	330	366
Mean.	4.90	9.23	10.5	8.74	8.29	5.35	3.33	66.4	38.5	13.0	10.6	12.2
Max...	7	14	12	11	11	7	13	231	147	65	36	26
Min...	4	7	9	8	6	3	1	3	7	5	3	9
Acre-ft.	301	549	645	538	460	329	198	4080	2290	799	655	726

Total run-off for water year 1934-35 = 11,570 acre-feet.

**Discharge of Bear Creek at Mouth at Sheridan Junction, Colorado, for Year
Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	8.8	12	12	10	8.6	8.8	12	2.4	33	20	65	23
2....	7.9	13	14	11	8.6	8.5	12	2.2	20	18	39	20
3....	7.3	13	17	9.7	8.6	8.5	11	2.3	21	16	173	17
4....	7.3	13	18	14	8.6	8.5	12	1.3	15	14	137	16
5....	8.2	12	16	9.7	8.6	8.2	11	2.0	16	12	209	12
6....	8.5	12	16	9.7	8.6	7.9	11	2.4	14	11	228	14
7....	7.6	12	17	9.4	8.6	7.6	11	11	16	10	163	11
8....	6.2	12	20	9.4	8.6	7.3	11	13	14	11	126	9.1
9....	6.6	12	20	9.4	8.6	7.0	9.7	8.2	21	11	98	9.7
10....	6.6	12	20	9.4	8.6	7.3	8.8	7.6	59	12	88	12
11....	6.4	12	20	9.4	8.0	8.2	8.5	6.8	61	49	96	12
12....	6.2	12	18	9.1	8.0	7.3	6.2	8.2	41	4.7	124	12
13....	6.8	13	19	9.4	8.0	7.0	5.2	14	17	5.0	156	12
14....	8.5	12	20	9.1	8.0	7.0	4.4	39	16	4.7	85	11
15....	7.3	12	18	9.1	8.0	7.0	3.1	56	18	4.7	108	12
16....	8.5	12	17	8.8	8.0	6.6	3.0	51	18	4.7	101	12
17....	10	13	18	9.1	8.0	6.8	2.7	53	18	3.5	93	12
18....	9.4	12	18	9.4	8.0	6.8	2.7	18	18	3.6	111	12
19....	10	13	17	9.0	8.0	6.8	2.6	13	21	3.8	118	11
20....	9.7	13	14	9.0	*8.2	6.8	2.4	12	23	4.0	122	12
21....	10	12	11	9.0	7.6	6.8	2.7	13	17	3.8	115	13
22....	12	12	16	9.0	7.0	6.8	2.4	12	19	3.5	108	12
23....	11	12	15	9.0	6.2	9.1	2.4	16	41	3.3	96	13
24....	14	12	14	9.4	6.2	10	2.4	20	24	2.9	88	14
25....	16	12	12	10	6.6	10	1.6	12	29	3.5	80	13
26....	22	12	12	16	7.9	11	1.9	11	22	4.0	73	21
27....	18	12	10	12	7.6	11	1.2	13	18	6.4	60	26
28....	13	12	11	15	7.9	12	.7	27	26	44	49	37
29....	14	12	13	11	8.8	12	1.3	18	22	18	39	58
30....	13	12	11	10	....	11	2.3	13	20	21	33	47
31....	12	....	12	8.8	....	12	....	22	....	20	27	....
Total	312.8	367	486	312.3	232	261.6	169.2	500.4	718	353.1	3208	515.8
Mean.	10.1	12.2	15.7	10.1	8.0	8.44	5.64	16.1	23.9	11.4	10.3	17.2
Max...	22	13	20	16	8.8	12	12	56	61	49	228	58
Min...	6.2	12	10	8.8	6.2	6.6	.7	1.3	14	2.9	27	9.1
Acre-ft.	620	728	964	619	460	519	336	993	1420	700	6360	1020

Total run-off for water year 1935-36 = 14,739 acre-feet.

*Discharge measurement.

Discharge of Clear Creek Near Golden, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	78	56	*26	....	....	49	42	98	696	729	512	220
2....	80	54	....	....	....	49	46	82	685	696	416	232
3....	80	56	....	....	....	49	50	64	718	848	730	220
4....	78	58	....	....	....	47	48	66	740	812	707	215
5....	73	64	....	....	....	45	46	62	764	685	560	175
6....	71	69	....	....	....	44	48	73	752	630	449	185
7....	67	69	....	....	*48	43	45	85	752	590	376	180
8....	71	64	....	....	....	45	43	106	800	590	368	225
9....	73	53	....	....	....	47	45	113	860	560	368	210
10....	71	62	....	....	....	46	43	109	1240	570	332	180
11....	69	52	....	....	....	47	39	122	1540	560	325	175
12....	71	47	....	....	....	50	42	135	2020	641	339	163
13....	71	52	....	....	....	48	44	195	1550	400	318	151
14....	61	53	....	....	....	45	45	220	1640	311	311	143
15....	59	48	....	*52	....	44	46	210	1630	339	290	143
16....	61	59	....	....	....	43	49	180	1660	353	318	139
17....	61	61	....	....	....	41	61	171	1410	368	416	139
18....	62	76	....	....	....	41	45	368	1150	440	368	143
19....	64	82	....	....	....	41	45	339	1140	424	304	139
20....	67	76	....	....	....	41	52	311	1150	408	284	129
21....	67	96	....	....	....	39	62	297	1160	400	277	129
22....	64	89	....	....	....	37	61	376	1110	432	264	129
23....	62	69	....	....	....	38	59	503	1110	530	264	129
24....	64	78	....	....	....	37	82	630	1040	476	290	129
25....	59	75	....	....	....	37	54	674	985	432	318	122
26....	53	52	....	....	....	38	62	674	948	400	332	125
27....	56	45	....	....	....	42	82	685	910	384	304	135
28....	58	52	....	....	....	37	98	764	872	346	284	135
29....	57	48	....	....	....	40	85	764	812	346	251	135
30....	56	38	....	....	....	41	92	718	776	503	215	132
31....	57	....	....	....	....	42	....	685	....	590	210	....
Total	2041	1853	....	....	....	1333	1661	9879	32620	15793	11100	4806
Mean.	65.8	61.8	30	40	50	43.0	55.4	319	1087	509	358	160
Max...	80	96	....	....	....	50	98	764	2020	848	730	232
Min...	53	38	....	....	....	37	39	62	685	311	210	122
Acre-ft.	4050	3680	1840	2460	2780	2640	3290	19590	64700	31320	22020	9530

Total run-off for water year 1934-35=167,900 acre-feet.

Discharge of Clear Creek Near Golden, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	126	86	59	....	....	78	39	263	1580	755	460	302
2....	122	93	59	....	....	64	26	263	1400	668	477	288
3....	119	90	69	....	....	66	37	283	1200	589	611	292
4....	110	88	54	....	....	73	46	321	1030	556	692	283
5....	110	69	73	....	....	67	39	366	925	528	630	271
6....	110	80	54	....	....	66	29	439	838	511	838	259
7....	106	80	47	....	....	66	34	460	824	494	730	243
8....	103	82	44	....	....	64	50	404	978	494	578	240
9....	106	80	53	....	....	62	46	397	1140	494	578	229
10....	101	80	75	....	....	59	40	390	1180	528	536	208
11....	101	71	75	....	....	37	53	390	1160	680	502	196
12....	101	71	69	....	....	53	75	432	1200	692	578	202
13....	101	67	67	....	....	48	97	528	1460	589	536	196
14....	95	62	62	....	....	46	132	567	1260	511	477	193
15....	90	62	66	....	....	41	144	622	1180	486	486	196
16....	95	62	60	....	....	36	175	794	1160	453	477	199
17....	129	75	60	....	....	36	187	809	1100	439	460	180
18....	119	80	60	....	....	43	196	824	1050	460	460	170
19....	119	69	60	....	....	46	193	1010	1030	453	494	166
20....	119	56	60	....	....	32	208	1160	960	439	494	172
21....	122	58	58	....	....	34	202	1180	925	418	453	172
22....	119	54	58	....	....	34	205	1120	925	397	418	169
23....	122	60	*58	....	....	54	229	1080	910	360	390	166
24....	119	59	58	....	*58	44	215	1140	882	336	342	155
25....	117	59	58	....	....	56	232	1240	852	330	316	142
26....	124	58	55	....	....	47	243	1260	867	330	306	152
27....	122	52	55	....	*46	41	255	1320	896	390	325	155
28....	112	48	55	....	....	50	243	1340	867	502	342	164
29....	106	54	55	....	....	48	271	1100	896	460	311	175
30....	103	62	55	....	....	46	271	1460	882	439	297	178
31....	86	....	55	....	....	46	1580	....	411	297	....	....
Total	3434	2067	1846	....	....	1583	4212	24542	31557	15192	14941	6113
Mean.	111	68.9	59.5	50	52	51.1	140	792	1050	490	482	204
Max...	129	93	75	....	....	78	271	1580	1580	755	838	302
Min...	86	48	44	....	....	32	26	263	824	330	297	142
Acre-ft.	6810	4100	3660	3070	2990	3140	8350	48680	62590	30130	29640	12120

Total run-off for water year 1935-36=215,280 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of Clear Creek at Mouth, Near Derby, Colorado, for Year Ending Sept. 30, 1935												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	3	2	23	30	18	16	1	8	141	124	70	11
2....	3	3	24	29	13	14	1	5	115	139	34	12
3....	3	4	19	27	12	9	1	4	113	205	20	9
4....	3	4	21	28	6	7	1	4	130	210	91	10
5....	3	3	24	28	8	7	1	3	128	180	52	10
6....	3	3	26	14	23	10	1	4	141	144	16	11
7....	3	3	29	9	21	8	1	4	159	127	12	17
8....	3	3	32	7	10	7	1	3	159	146	12	20
9....	3	3	36	6	11	7	2	4	176	145	24	18
10....	3	3	37	5	28	3	10	4	206	157	16	10
11....	3	3	37	4	25	4	7	6	236	156	12	7
12....	3	3	33	4	29	5	3	5	485	198	10	5
13....	3	3	25	4	25	9	2	19	460	257	11	4
14....	3	2	24	10	25	25	1	41	476	130	10	3
15....	3	2	26	6	23	14	1	27	489	91	9	2
16....	2	2	21	20	28	7	1	20	474	52	11	2
17....	2	2	21	21	28	6	1	37	397	41	41	2
18....	2	3	25	21	29	6	2	228	316	128	37	2
19....	2	3	30	24	19	8	1	210	223	123	14	2
20....	2	3	37	24	12	9	1	149	228	98	12	1
21....	2	3	40	24	14	6	1	113	246	79	12	6
22....	2	3	41	24	18	5	1	86	273	80	11	6
23....	2	3	35	24	18	5	1	133	286	64	14	6
24....	2	3	36	49	19	2	12	148	274	34	22	5
25....	2	3	33	52	20	1	28	142	239	11	52	5
26....	2	6	30	31	12	1	33	132	212	7	24	5
27....	2	43	30	22	11	1	30	142	189	6	13	9
28....	2	37	33	20	11	1	20	179	168	16	11	17
29....	2	39	34	16	...	1	13	200	163	20	10	8
30....	2	28	32	20	...	1	11	225	131	65	9	6
31....	2	27	16	...	1	...	162	...	97	8	...	
Total	77	225	921	619	516	206	190	2447	7433	3330	700	.241
Mean.	2.48	7.50	29.7	20.0	18.4	6.65	6.33	78.9	248	107	22.6	8.03
Max...	3	43	41	52	29	25	33	228	489	257	91	30
Min...	2	2	19	4	6	1	1	3	113	6	8	1
Acre-ft.	153	446	1830	1230	1020	409	377	4850	14740	6600	1390	478

Total run-off for water year 1934-35 = 33,520 acre-feet.

Discharge of Clear Creek at Mouth Near Derby, Colorado, for Year Ending Sept. 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	5.4	39	19	...	...	10	58	20	708	151	88	39
2....	5.4	36	17	...	...	10	59	21	586	96	92	38
3....	8.1	39	36	...	...	10	56	11	586	38	1010	48
4....	10	58	39	...	...	*10	50	36	425	25	708	34
5....	12	56	33	...	...	9.0	34	106	292	24	821	25
6....	12	54	28	...	...	9.0	34	126	158	30	1010	29
7....	11	56	28	...	...	10	40	225	94	96	821	29
8....	11	56	27	...	...	9.0	39	235	94	108	724	16
9....	11	54	26	...	...	7.2	38	230	251	118	664	12
10....	11	40	27	...	...	6.3	21	225	798	137	355	25
11....	11	44	28	...	...	16	16	225	548	168	245	23
12....	12	45	28	...	...	13	12	220	444	334	201	21
13....	12	48	26	...	...	14	9	215	603	238	303	16
14....	11	54	25	...	...	21	11	200	538	98	182	32
15....	10	45	24	...	...	32	14	176	398	46	122	33
16....	10	40	23	...	...	13	16	285	319	18	90	23
17....	45	30	24	...	...	16	11	363	251	42	71	13
18....	30	30	25	...	...	16	11	407	359	68	77	5
19....	16	28	23	...	...	17	10	367	371	84	94	5
20....	9.0	23	21	...	...	11	17	402	421	71	90	8.1
21....	7.2	20	22	...	*13	10	40	355	384	66	80	18
22....	21	20	22	...	...	11	30	307	334	61	86	23
23....	28	20	*22	...	...	38	34	245	307	45	73	23
24....	26	23	22	...	*28	62	39	207	251	25	58	22
25....	19	23	20	...	...	34	40	190	213	26	48	24
26....	17	21	21	...	...	69	82	268	198	28	46	26
27....	18	23	22	...	...	64	100	322	228	36	45	88
28....	14	20	22	...	...	53	75	444	213	207	77	248
29....	13	20	23	...	...	51	59	430	222	204	88	496
30....	16	21	23	...	...	61	39	462	238	151	75	314
31....	38	...	22	...	...	62	...	652	...	75	56	5
Total	480.1	1086	768	...	...	774.5	1094	7977	10832	2914	8500	1756.1
Mean.	15.5	36.2	24.8	25	18	25.0	36.5	257	361	94	274	58.5
Max...	45	58	39	...	...	69	100	652	798	334	1010	496
Min...	5.4	20	17	...	...	6.3	9	11	94	18	45	5
Acre-ft.	952	2150	1520	1540	1040	1540	2170	15820	21480	5780	16860	3480

Total run-off for water year 1935-36 = 74,332 acre-feet.

*Discharge measurement.

Discharge of Fall River Near Idaho Springs, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	...	...	...	...	...	3	8	114	56	36	30
2	6	...	...	...	...	...	3	6	112	53	29	22
3	6	...	...	...	...	...	3	4	107	62	30	19
4	5	...	...	...	...	...	3	5	108	61	30	16
5	5	...	...	...	...	...	4	6	108	57	27	14
6	5	...	...	...	...	...	4	8	108	55	23	14
7	5	...	...	...	...	...	4	8	115	50	20	18
8	4	...	...	...	...	...	3	10	119	52	20	21
9	4	...	...	...	...	...	3	10	120	50	20	20
10	4	...	...	...	...	...	3	12	124	49	18	18
11	4	...	...	*4	...	...	3	32	132	53	21	14
12	5	...	...	...	...	...	3	48	144	46	19	12
13	5	...	...	...	...	...	4	55	151	40	18	11
14	5	...	...	...	...	...	6	56	131	42	16	12
15	5	...	...	...	...	...	7	56	129	43	22	12
16	5	...	...	...	...	...	8	61	124	44	52	10
17	5	...	...	...	...	...	6	72	97	55	58	10
18	4	...	...	...	...	...	6	88	86	43	49	9
19	5	*3	...	...	...	*5	8	82	86	43	38	8
20	4	...	...	...	...	...	9	76	88	49	38	9
21	4	...	...	...	...	...	8	84	91	50	36	10
22	4	...	...	...	...	...	8	97	86	49	31	10
23	4	...	...	...	...	...	8	91	86	50	30	9
24	4	...	...	...	...	...	7	96	82	38	41	9
25	4	...	...	...	*6	...	4	100	78	29	44	10
26	4	...	...	...	...	...	8	100	76	29	33	12
27	4	...	...	...	...	...	10	107	79	37	36	10
28	4	...	...	...	...	...	4	10	110	73	35	30
29	4	...	...	...	...	...	2	12	108	70	35	25
30	4	...	...	...	...	...	3	10	110	62	44	25
31	4	...	...	...	...	...	3	...	114	44	28	...
Total	141	...	...	...	...	...	178	1820	3086	1443	943	396
Mean.	4.55	3	3	4	6	5	5.93	58.7	103	46.5	30.4	13.2
Max...	6	...	...	...	...	...	12	114	151	62	58	30
Min...	4	...	...	...	...	...	3	4	62	29	16	7
Acre-ft.	280	179	184	246	333	307	353	3610	6120	2860	1870	785

Total run-off for water year 1934-35=17,130 acre-feet.

Discharge of Fall River Near Idaho Springs, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.1	8.6	...	...	...	...	3.6	26	94	56	31	35
2	6.8	9.2	...	...	...	...	3.6	25	84	50	30	33
3	6.5	7.7	...	...	...	...	3.6	28	78	43	40	31
4	8.3	6.2	...	...	...	*3.8	3.6	39	68	48	48	27
5	9.2	6.0	...	...	...	...	3.6	53	56	40	44	25
6	8.9	6.5	...	*4.4	...	...	4	50	56	41	42	22
7	8.6	5.8	*4.5	...	*2.5	...	4	42	68	42	38	22
8	8.9	6.0	...	...	...	...	4	38	83	40	42	23
9	8.9	6.5	...	...	...	...	4	35	89	42	40	21
10	8.0	6.2	...	...	...	...	4	36	83	42	36	21
11	8.0	8.0	...	...	...	...	10	42	78	51	36	20
12	8.9	9.5	...	...	...	...	15	48	80	66	45	20
13	8.6	8.6	...	...	...	...	22	58	81	45	41	18
14	7.7	8.6	...	...	...	...	16	69	83	38	36	16
15	7.7	8.6	...	...	...	...	17	83	81	36	34	16
16	8.3	7	...	...	...	...	20	92	80	34	31	16
17	9.5	7	...	...	...	...	22	94	81	34	30	14
18	10	7	...	...	...	...	19	89	80	30	34	13
19	11	7	...	...	...	...	19	92	78	28	35	13
20	11	7	...	...	...	...	20	96	76	30	32	12
21	10	6	...	...	...	...	20	94	74	33	31	12
22	8.6	6	...	...	...	...	22	89	72	31	29	11
23	9.5	6	...	...	...	...	25	83	63	30	27	11
24	9.2	6	...	...	...	...	24	78	60	28	24	11
25	7.4	6	...	...	...	...	24	81	60	28	23	11
26	9.2	5	...	...	...	...	23	88	66	27	23	12
27	10	5	...	...	...	...	24	96	69	28	32	12
28	10	5	...	...	...	...	23	96	72	35	35	12
29	9.8	5	...	...	...	...	24	91	76	36	33	14
30	8.9	5	...	...	...	...	26	108	63	33	39	15
31	7.7	...	...	...	...	...	...	110	...	30	38	...
Total	272.2	202	...	...	...	...	453.0	2149	2232	1175	1079	539
Mean.	8.78	6.73	4.50	4.00	3.00	3.71	15.1	69.3	74.4	37.9	34.8	18.0
Max...	11	...	...	...	...	...	26	110	94	66	48	35
Min...	6.5	...	...	...	...	...	3.6	25	56	27	23	11
Acre-ft.	540	401	278	246	173	228	899	4260	4430	2330	2140	1070

Total run-off for water year 1935-36=16,995 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of South Boulder Creek Near Eldorado Springs, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	7	...	...	10	7	8	62	324	233	90	24
2	8	7	...	...	9	7	8	59	319	219	81	23
3	8	6	...	...	8	8	11	50	306	214	73	21
4	8	6	...	*2	8	6	15	48	287	204	72	19
5	8	8	...	...	8	7	12	50	285	200	66	18
6	8	9	...	...	9	7	13	63	298	197	63	18
7	7	12	...	...	8	8	9	69	306	192	62	19
8	7	10	...	...	7	7	11	72	303	188	59	28
9	7	9	...	...	7	6	10	76	300	183	53	30
10	7	9	...	...	5	8	7	81	333	183	49	28
11	7	9	...	...	5	8	9	86	447	188	47	23
12	6	8	*5	...	5	7	13	101	432	188	45	18
13	5	8	...	...	5	8	13	117	432	160	42	18
14	4	7	...	...	5	8	14	124	417	146	38	16
15	4	7	...	...	5	8	16	134	408	130	36	16
16	5	8	...	...	5	7	20	130	402	112	41	15
17	7	9	...	...	6	8	24	140	372	114	61	16
18	7	8	...	...	6	8	19	295	311	126	52	15
19	8	8	...	...	6	7	25	306	333	121	39	14
20	8	9	...	...	6	8	31	248	361	117	32	14
21	8	8	...	...	7	5	37	231	390	126	37	14
22	7	8	...	...	8	8	39	280	378	115	41	13
23	6	10	...	...	7	6	46	411	375	117	47	13
24	6	10	...	...	6	8	49	402	344	99	52	13
25	6	9	...	...	5	7	47	393	327	89	54	13
26	6	9	...	...	6	8	46	378	300	81	46	15
27	6	9	...	...	6	9	44	361	287	76	36	20
28	6	9	...	...	6	6	50	347	274	75	29	22
29	6	9	...	...	6	6	47	338	259	84	27	20
30	6	9	...	...	11	62	336	243	115	26	19	
31	6	...	...	...	8	...	327	105	25	...	...
Total	206	254	...	...	184	230	755	6115	10153	4497	1521	555
Mean	6.65	8.47	5.0	5.0	6.57	7.42	25.2	197	338	145	49.1	18.5
Max..	8	12	...	...	10	11	62	411	447	233	90	28
Min...	4	6	...	...	5	5	7	48	243	75	25	13
Acre-ft.	409	504	307	307	365	456	1500	12130	20140	8920	3020	1100

Total run-off for water year 1934-35=49,158 acre-feet.

Discharge of South Boulder Creek Near Eldorado Springs, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	12	12	8.8	8.2	12	13	174	361	133	97	62
2	15	12	12	7.6	8.0	13	22	171	326	117	82	58
3	14	14	12	6.4	8.0	12	26	183	301	104	131	58
4	14	7.2	12	6.0	8.0	14	21	218	269	100	152	56
5	14	7.6	12	6.0	8.2	14	26	253	240	93	139	51
6	12	14	12	5.8	8.4	14	20	274	208	88	148	49
7	12	27	12	6.0	8.2	17	20	245	200	91	142	44
8	12	20	12	6.2	7.0	19	22	225	232	90	133	43
9	13	18	12	6.6	7.0	17	26	198	258	87	125	42
10	12	17	12	6.4	7.0	24	26	240	258	97	121	40
11	11	15	12	6.4	7.0	10	44	282	274	104	123	40
12	11	17	13	6.6	7.0	15	62	290	250	137	129	42
13	10	14	11	6.6	7.0	10	76	307	253	119	162	39
14	10	15	8.6	6.8	7.0	9.5	87	339	299	93	152	36
15	10	12	8.4	7.2	7.0	4.8	77	385	344	88	139	36
16	10	10	10	7.8	7.0	7.2	77	411	320	80	121	40
17	15	13	24	8.0	7.0	12	90	405	253	77	106	36
18	16	15	34	7.8	7.0	19	104	388	225	76	104	32
19	16	17	8.0	7.8	7.0	8.6	117	380	248	73	117	30
20	18	8.2	14	7.4	7.0	6.8	137	377	230	71	117	27
21	18	12	11	7.2	7.2	12	29	109	366	218	69	111
22	14	16	9.5	7.6	12	19	104	350	208	70	100	16
23	14	15	10	7.6	11	16	100	326	188	62	87	15
24	16	13	9.0	7.8	11	16	117	320	169	57	73	16
25	24	12	9.0	7.8	13	32	164	312	190	57	66	16
26	18	12	9.0	7.6	16	62	188	342	176	64	62	22
27	10	13	9.0	7.4	12	24	188	353	169	57	61	27
28	13	14	9.0	7.2	12	23	174	353	162	91	61	28
29	12	11	9.0	7.6	13	23	183	334	159	131	63	43
30	13	11	9.0	7.6	...	23	183	369	157	139	61	48
31	12	...	9.0	8.0	...	13	...	372	...	109	61	
Total	425	414	365.5	221.6	260	538.9	2603	9542	7145	2824	3346	1110
Mean	13.7	13.8	11.8	7.15	8.97	17.4	86.8	308	238	91.1	108	37
Max...	24	27	34	8.8	16	62	188	411	361	139	162	62
Min...	10	7.2	8.0	5.8	7.0	4.8	13	171	157	57	61	15
Acre-ft.	843	821	725	440	516	1070	5160	18930	14170	5600	6640	2200

Total run-off for water year 1935-36=57,115 acre-feet.

*Discharge measurement.

Discharge of Middle Boulder Creek at Nederland, Colorado, for Year Ending Sept. 30, 1935												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	12	6	5	4	5	4	6	26	170	265	128	30
2....	12	6	5	4	4	4	6	25	151	240	118	24
3....	12	3	5	4	5	4	6	22	141	263	100	22
4....	11	6	5	4	5	4	6	22	142	268	89	19
5....	10	9	5	4	5	4	6	24	163	234	78	18
6....	10	10	5	5	5	5	6	27	193	206	72	16
7....	9	9	5	5	5	4	6	27	195	220	70	21
8....	9	9	5	5	5	4	5	28	244	226	65	30
9....	9	9	5	5	5	4	5	29	240	204	62	29
10....	9	9	5	5	5	4	4	36	315	199	57	22
11....	10	9	5	5	5	4	6	39	419	201	53	19
12....	15	8	5	5	5	5	6	49	440	224	48	19
13....	20	8	5	5	5	5	8	52	460	189	43	35
14....	13	8	6	5	5	5	10	49	528	179	38	34
15....	11	8	6	5	5	6	10	48	417	156	37	32
16....	10	8	5	5	4	5	16	53	406	147	38	30
17....	10	7	5	5	4	5	12	62	304	158	51	28
18....	10	7	5	5	4	4	13	74	253	189	43	22
19....	10	7	5	5	4	5	18	57	276	181	38	16
20....	8	7	5	5	5	5	23	49	363	170	34	13
21....	8	7	5	5	4	5	27	51	403	172	32	13
22....	8	7	6	5	4	4	30	63	380	166	29	13
23....	8	10	6	5	4	4	29	86	360	166	29	12
24....	6	8	6	5	4	4	28	98	344	138	28	12
25....	6	7	6	5	4	4	20	111	300	121	34	12
26....	7	9	6	5	4	6	22	138	263	115	31	15
27....	7	9	5	5	4	5	24	147	288	118	28	17
28....	7	9	5	5	5	5	24	150	280	115	27	16
29....	6	8	5	5	5	5	26	145	268	117	26	18
30....	6	7	5	5	5	6	28	161	268	145	25	14
31....	6	..	5	5	..	6	..	177	..	138	24	..
Total	295	234	161	150	128	144	436	2125	8974	5630	1575	621
Mean	9.52	7.80	5.19	4.84	4.57	4.65	14.5	68.5	299	182	50.8	20.7
Max...	20	10	6	6	5	6	30	177	528	268	128	35
Min...	6	3	5	4	4	4	4	22	141	115	24	12
Acre-ft.	585	464	319	298	254	286	865	4210	17800	11170	3120	1230

Total run-off for water year 1934-35=40,601 acre-feet.

Discharge of Middle Boulder Creek at Nederland, Colorado, for Year Ending Sept. 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	12	11	7.3	4.2	4.6	5.2	5.7	82	312	166	82	31
2....	11	11	7.3	4.0	4.6	5.2	6.4	87	244	153	80	28
3....	10	12	6.8	4.0	4.6	5.7	6.4	117	214	150	127	28
4....	9.0	12	6.6	4.0	4.6	6.0	5.3	153	187	148	107	28
5....	9.0	7.9	6.4	4.2	4.6	6.0	5.7	191	153	139	100	26
6....	11	12	6.4	4.3	4.5	6.2	5.7	174	138	138	101	23
7....	10	13	6.0	4.6	4.5	6.0	6.4	131	156	134	93	22
8....	10	12	6.6	4.6	4.5	6.6	6.0	103	226	128	85	21
9....	9.2	11	6.0	4.6	4.5	6.4	6.4	85	265	132	77	20
10....	9.4	10	5.5	4.6	4.5	6.0	7.0	83	253	148	79	19
11....	8.5	9.8	5.7	4.5	4.5	6.2	9.4	96	249	226	81	22
12....	8.7	9.8	5.7	5.5	4.3	5.5	14	118	285	218	80	19
13....	8.7	11	5.8	5.3	4.6	5.7	22	150	304	174	70	18
14....	8.1	10	5.7	5.3	4.6	5.3	26	202	300	144	63	17
15....	8.7	8.5	5.3	4.6	4.6	5.3	29	263	283	144	57	16
16....	8.3	9.6	4.3	5.3	4.5	5.5	34	283	302	118	52	16
17....	12	9.2	4.2	5.7	4.6	5.3	47	263	297	103	55	16
18....	11	8.7	4.5	5.8	4.6	5.2	56	242	308	93	68	16
19....	11	9.0	5.0	6.4	4.6	5.3	63	240	297	87	60	15
20....	13	9.0	4.6	6.2	4.5	5.5	78	261	261	81	61	14
21....	13	8.3	4.6	6.0	4.6	6.2	69	261	255	77	55	14
22....	12	7.9	4.5	5.5	4.8	5.8	77	238	253	72	52	26
23....	13	7.9	4.3	5.7	5.0	5.3	97	226	222	69	46	25
24....	12	7.9	4.2	5.3	5.3	5.3	102	232	222	68	40	24
25....	11	7.7	4.2	5.0	5.7	5.3	109	249	249	70	37	22
26....	12	7.5	4.3	5.0	5.7	5.3	105	280	244	66	34	22
27....	14	7.5	4.6	5.0	5.7	5.3	106	315	220	71	32	24
28....	14	7.5	4.6	4.8	5.5	6.0	104	285	216	117	34	26
29....	13	7.5	4.8	4.8	5.3	5.5	96	270	240	103	31	25
30....	12	7.0	4.5	4.8	5.7	5.7	82	328	202	104	30	24
31....	11	..	4.3	4.8	5.3	5.3	348	..	88	31	..	..
Total	335.6	283.2	163.9	155.1	138.5	175.1	1386.4	6356	7357	3729	2000	647
Mean	10.8	9.44	5.29	5.00	4.78	5.65	46.2	205	245	120	64.5	21.6
Max...	14	13	7.3	6.4	5.7	6.6	109	348	312	226	127	31
Min...	8.1	7	4.2	4.0	4.3	5.2	5.3	82	138	66	30	14
Acre-ft.	666	562	325	308	275	347	2750	12610	14590	7400	3970	1280

Total run-off for water year 1935-36=45,083 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of Boulder Creek Near Orodell, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	6	8	10	8	6	10	44	108	412	174	68
2	10	7	6	9	9	13	12	47	96	412	158	66
3	9	6	6	13	8	9	8	43	92	419	153	70
4	11	5	4	7	8	6	10	34	112	440	137	71
5	8	4	3	3	8	7	15	34	135	412	135	68
6	9	6	2	8	7	7	15	33	140	385	110	67
7	10	6	5	9	7	5	26	39	137	348	92	67
8	8	6	4	10	5	6	17	50	145	392	106	73
9	9	6	5	4	7	7	13	49	142	419	98	73
10	9	4	9	5	5	6	6	52	168	360	90	68
11	9	6	9	6	6	4	6	60	198	360	90	67
12	9	4	12	4	7	6	10	60	240	360	90	66
13	9	4	12	10	9	6	6	61	291	360	85	66
14	10	4	9	9	8	8	8	70	785	318	77	64
15	9	4	7	4	22	9	15	68	974	275	76	61
16	10	4	10	5	11	7	19	68	996	222	74	56
17	9	4	10	6	4	4	18	90	745	180	79	50
18	9	3	21	4	14	6	20	121	540	230	71	49
19	9	4	10	4	15	6	29	114	461	255	76	49
20	8	3	9	5	6	6	35	114	500	260	79	49
21	8	5	9	3	7	6	40	104	688	275	79	52
22	8	4	6	3	9	6	58	119	716	275	77	43
23	6	6	14	3	8	6	55	174	716	291	76	44
24	6	6	9	3	20	11	47	153	661	260	80	47
25	7	6	12	4	10	17	43	158	624	226	84	38
26	6	7	13	5	9	12	27	145	524	202	82	35
27	6	6	10	6	8	10	28	150	447	214	76	32
28	6	9	6	5	10	12	15	164	468	168	73	28
29	6	7	11	7	7	19	19	153	440	164	71	15
30	7	8	13	9	7	6	47	153	398	168	70	28
31	6	...	8	9	...	12	...	125	...	180	70	...
Total	254	160	272	192	255	240	674	2849	12687	9242	2888	1630
Mean.	8.19	5.33	8.77	6.19	9.11	7.74	22.5	91.9	423	298	93.2	54.3
Max...	11	9	21	13	22	17	58	174	996	440	174	73
Min...	6	3	2	3	4	4	6	33	92	164	70	15
Acre-ft.	504	317	540	381	506	476	1340	5650	25160	18330	5730	3230

Total run-off for water year 1934-35=62,170 acre-feet.

Discharge of Boulder Creek Near Orodell, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	44	38	20	35	1.6	22	92	468	336	218	88
2	27	40	39	24	32	3.0	17	110	435	290	190	82
3	33	19	40	24	36	8.6	16	110	405	261	295	74
4	39	39	40	27	44	10	24	128	375	252	336	80
5	26	34	45	20	38	18	12	142	326	234	285	70
6	17	37	41	23	26	4.5	18	142	290	211	256	63
7	45	37	53	21	26	9.8	15	142	214	208	204	63
8	34	38	33	31	26	20	15	142	214	190	197	63
9	54	32	44	20	26	28	18	128	266	190	180	63
10	38	27	42	20	26	30	20	142	275	194	161	67
11	43	27	41	19	24	23	28	145	230	225	164	61
12	27	34	43	25	24	21	32	140	243	336	194	67
13	25	33	44	23	24	24	63	137	270	310	211	53
14	44	33	49	24	24	21	64	145	280	200	161	50
15	47	27	41	27	24	20	56	168	320	190	114	45
16	54	32	42	43	20	18	61	184	480	225	119	46
17	45	26	43	33	20	33	77	184	487	211	119	45
18	45	30	41	31	20	44	88	174	480	194	142	42
19	27	33	45	28	20	38	87	214	535	190	142	28
20	23	27	43	27	20	31	102	331	468	194	158	37
21	20	27	41	29	18	34	108	405	442	194	140	27
22	20	27	46	31	10	26	110	442	448	184	128	32
23	20	39	46	34	18	37	100	442	435	148	106	31
24	29	30	48	33	14	39	104	417	387	137	100	31
25	20	32	34	37	12	52	110	411	399	145	92	27
26	23	33	28	43	17	44	102	429	461	137	90	19
27	21	48	30	38	8.6	47	119	500	442	142	92	27
28	35	31	27	38	3.5	49	102	500	381	194	100	27
29	46	39	25	42	4.0	31	112	468	387	200	94	35
30	46	33	26	40	...	36	104	487	411	243	87	45
31	49	...	29	40	...	30	...	500	...	243	88	45
Total	1049	988	1227	915	640.1	831.5	1906	8101	11254	6608	4963	1488
Mean.	33.8	32.9	39.6	29.5	22.1	26.8	63.5	261	375	213	160	49.6
Max...	54	48	53	43	44	52	119	500	535	336	336	88
Min...	17	19	25	19	3.5	1.6	12	92	214	137	87	19
Acre-ft.	2080	1960	2430	1810	1270	1650	3780	16070	22320	13110	9840	2950

Total run-off for water year 1935-36=79,270 acre-feet.

**Discharge of Boulder Creek at Mouth, Near Longmont, Colorado, for Year
Ending Sept. 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	1	1	2	2	4	4	0	3	213	3	2	3
2....	1	2	2	2	4	5	1	1	184	3	2	2
3....	1	2	2	1	2	3	6	0	1	179	4	3
4....	2	2	1	2	3	4	0	1	152	6	2	3
5....	1	2	1	2	3	4	0	1	166	8	1	3
6....	1	2	1	2	3	3	0	0	181	3	2	2
7....	1	2	1	1	3	3	0	1	284	3	2	3
8....	1	2	1	1	3	3	0	1	352	3	2	40
9....	1	2	0	1	5	2	1	2	327	3	2	19
10....	2	2	0	2	4	3	1	1	346	4	2	12
11....	2	2	0	2	3	2	0	1	366	6	3	10
12....	2	2	0	2	3	3	0	1	420	6	2	8
13....	1	2	2	1	3	2	0	5	344	6	3	6
14....	1	2	3	1	3	3	0	14	449	4	3	6
15....	1	2	3	1	2	4	0	9	531	4	2	5
16....	1	2	2	1	3	5	0	3	534	4	2	6
17....	1	3	1	2	2	6	0	2	402	5	2	6
18....	1	3	1	2	2	7	0	159	159	4	2	7
19....	1	3	1	2	2	4	0	511	72	5	2	6
20....	1	3	1	4	2	1	1	237	28	6	2	6
21....	1	4	1	4	1	1	0	127	49	7	2	4
22....	1	3	1	5	1	1	0	69	93	10	1	4
23....	1	3	1	6	1	1	5	255	102	5	2	4
24....	1	4	1	7	2	0	9	296	82	4	3	4
25....	1	3	1	8	2	0	32	192	52	3	3	4
26....	1	3	2	6	3	0	6	147	20	4	2	5
27....	1	3	4	4	3	1	2	135	5	3	2	10
28....	1	3	4	4	4	0	1	492	2	3	2	28
29....	1	3	2	4	...	0	3	372	2	2	3	20
30....	1	3	2	4	...	1	6	346	6	2	2	14
31....	1	2	4	...	1	...	...	296	2	3	...	...
Total	35	75	46	91	77	80	68	3681	6102	135	67	254
Mean.	1.13	2.50	1.48	2.94	2.75	2.58	2.27	119	203	4.35	2.16	8.47
Max...	2	4	4	8	5	7	32	511	534	10	3	40
Min...	1	1	0	1	1	0	0	0	2	2	1	2
Acre-ft.	69	149	91	180	153	159	135	7300	12100	268	133	504

Total run-off for water year 1934-35=21,241 acre-feet.

**Discharge of Boulder Creek at Mouth, Near Longmont, Colorado, for Year
Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	17	25	32	28	24	31	45	101	44	2.6	0	1.8
2....	18	26	25	32	24	31	50	100	28	1.2	.2	2.2
3....	11	26	34	23	24	31	51	92	202	1.2	.81	3.0
4....	10	17	41	25	24	31	46	88	105	2.6	141	2.4
5....	11	24	40	22	24	31	46	87	76	2.4	.72	2.4
6....	10	25	40	19	24	27	41	88	51	2.6	.66	1.8
7....	7.0	24	47	22	24	22	50	102	34	2.6	.33	1.6
8....	6.5	25	56	24	24	20	35	111	24	3.5	.25	1.6
9....	7.5	23	40	24	24	20	28	111	30	4.5	.20	1.8
10....	8.5	23	56	24	24	20	25	128	235	3.5	.16	1.6
11....	9.0	19	56	30	24	20	25	130	313	10	.14	2.0
12....	10	19	56	27	24	20	34	116	210	52	.31	3.0
13....	8.5	18	46	19	24	20	29	97	172	34	.71	3.0
14....	7.5	15	41	34	24	19	52	94	162	8.0	.46	2.6
15....	7.0	15	38	37	24	17	54	80	148	10	.17	3.0
16....	9.5	22	38	40	24	20	51	69	261	7.0	.75	3.0
17....	15	41	38	43	24	20	56	72	344	1.2	.11	2.4
18....	14	42	42	46	24	20	71	50	281	1.2	.12	1.4
19....	17	44	46	43	24	20	70	29	290	1.2	.13	1.8
20....	12	43	42	43	24	20	63	9.0	254	1.0	.9.0	2.6
21....	11	35	56	43	24	23	84	10	183	.9	.5.0	2.4
22....	12	20	51	47	24	27	88	4.0	136	.9	.4.5	2.0
23....	13	22	42	52	24	27	102	6.5	92	.7	.3.5	4.0
24....	13	27	46	57	70	27	108	43	40	.6	.2.4	2.8
25....	18	36	40	50	66	31	107	25	5.5	.4	.2.6	2.6
26....	18	36	36	44	65	35	132	12	2.4	.3	.3.5	5.0
27....	14	34	40	43	51	35	109	30	6.5	.2	.4.0	9.0
28....	12	34	44	43	35	35	127	69	5.0	.5	.2.8	12
29....	12	29	37	43	31	40	111	20	2.2	0	.3.5	32
30....	15	36	37	43	...	40	105	7.0	2.6	.2.4	.2.2	25
31....	19	...	37	43	...	40	...	34	...	0	1.8	...
Total	373	825	1320	1113	870	820	1995	2014.5	3739.2	159.2	721.5	141.8
Mean.	12.0	27.5	42.6	35.9	30.0	26.5	66.5	65.0	125	5.14	23.3	4.73
Max...	19	44	56	57	65	40	132	130	344	52	141	32
Min...	6.5	15	25	19	24	17	25	4	2.2	0	0	1.4
Acre-ft.	740	1640	2620	2210	1730	1630	3960	4000	7420	316	1430	281

Total run-off for water year 1935-36=27,977 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of North St. Vrain Creek at Longmont Dam, Near Lyons, Colorado, for Year
Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	21	10	9	9	9	10	33	250	299	126	68
2	17	20	11	9	9	9	9	33	210	289	126	51
3	18	13	7	9	9	10	11	31	191	313	109	49
4	17	16	7	9	9	9	11	30	191	330	100	49
5	16	16	8	10	10	9	11	34	205	279	95	69
6	15	17	8	10	10	9	11	40	231	259	88	102
7	17	16	11	10	10	10	8	41	243	253	85	79
8	20	15	10	10	10	9	10	43	275	266	84	92
9	23	15	11	10	10	10	10	45	299	250	82	87
10	21	14	11	10	9	8	8	48	344	250	78	76
11	21	13	11	10	8	9	9	56	406	282	72	58
12	21	12	11	10	9	9	9	71	445	237	71	50
13	20	12	11	10	9	11	11	103	469	222	68	43
14	20	10	12	11	7	11	12	138	536	219	60	41
15	21	11	12	11	8	13	13	156	665	202	60	40
16	27	11	12	10	7	10	15	140	600	183	64	39
17	28	11	11	10	7	8	17	126	461	173	68	39
18	28	10	11	8	8	9	14	326	395	191	71	37
19	29	11	10	7	9	10	21	306	391	202	60	35
20	27	9	10	7	10	8	26	243	453	202	55	33
21	27	11	10	6	10	7	29	216	441	202	82	30
22	26	10	11	9	9	9	31	250	434	188	82	28
23	22	11	11	9	10	9	28	391	430	176	81	28
24	17	11	11	10	7	10	27	344	418	156	85	28
25	19	7	11	9	7	9	23	316	391	147	103	28
26	16	12	10	9	9	11	22	303	337	143	96	30
27	16	8	10	10	8	11	27	296	340	136	64	35
28	16	9	10	10	9	7	31	292	330	128	56	33
29	15	10	10	10	9	9	30	262	306	126	53	42
30	19	9	10	9	9	10	35	279	313	143	51	40
31	21	..	10	9	..	10	..	286	..	140	50	..
Total	637	371	319	290	246	292	529	5278	11000	6586	2425	1459
Mean.	20.5	12.4	10.3	9.35	8.79	9.42	17.6	170	367	212	78.2	48.6
Max.	29	21	12	11	10	13	35	391	665	330	126	102
Min.	15	7	7	6	7	7	8	30	191	126	50	28
Acre-ft.	1260	736	633	575	488	579	1050	10470	21820	13060	4810	2890

Total run-off for water year 1934-35=58,370 acre-feet.

Discharge of North St. Vrain Creek at Longmont Dam, Near Lyons, Colorado, for Year
Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	24	10	9.5	9.7	11	12	148	532	288	225	73
2	37	19	12	8.6	9.9	11	12	137	432	257	244	79
3	35	23	12	8.6	9.9	13	15	180	392	240	408	79
4	34	19	12	8.6	9.9	13	13	240	361	237	416	59
5	32	21	15	8.8	9.7	14	13	225	313	231	342	50
6	25	29	16	9.1	9.5	15	12	191	261	222	310	47
7	26	25	14	9.1	9.3	15	16	168	274	225	296	46
8	27	25	13	8.8	9.5	15	19	148	369	199	261	46
9	26	24	13	8.4	9.7	16	21	144	457	210	222	79
10	25	21	14	8.6	9.7	15	25	148	477	244	194	79
11	22	14	14	9.3	10	12	33	140	432	288	183	73
12	22	26	15	9.9	10	14	54	148	482	353	172	67
13	23	23	14	10	10	14	68	172	511	296	160	60
14	23	21	13	10	10	13	82	202	515	228	142	47
15	23	17	7.6	10	11	12	90	278	519	234	135	43
16	23	20	7.6	11	11	11	98	331	536	225	123	40
17	29	20	9.9	11	11	12	90	313	524	217	119	38
18	26	19	11	10	11	13	113	288	506	210	131	36
19	29	17	11	10	11	12	127	313	490	202	123	33
20	27	12	10	10	11	13	158	342	445	191	131	30
21	26	18	11	10	11	14	144	331	432	180	123	28
22	24	18	11	10	12	15	137	306	400	175	144	28
23	25	19	11	10	12	12	170	288	361	165	137	27
24	25	18	12	10	11	13	183	278	331	158	129	27
25	25	16	12	9.9	11	13	188	313	420	158	125	24
26	27	16	12	9.5	11	12	188	372	372	153	121	28
27	27	11	12	9.1	11	13	183	396	357	160	115	34
28	26	15	12	9.3	11	13	172	384	346	194	92	39
29	26	17	11	9.5	11	13	172	372	365	194	83	43
30	25	14	10	9.5	..	13	160	436	328	191	76	47
31	19	..	9.3	9.7	..	12	..	498	..	210	76	..
Total	828	581	367.4	295.8	303.8	407	2768	8230	12540	6735	5558	1429
Mean.	26.7	19.4	11.9	9.54	10.5	13.1	92.3	265	418	217	179	47.6
Max...	39	29	16	11	12	16	188	498	536	353	416	79
Min...	19	11	7.6	8.4	9.3	11	12	137	261	153	76	24
Acre-ft.	1640	1150	729	587	603	807	5490	16320	24870	13360	11020	2830

Total run-off for water year 1935-36=79,406 acre-feet.

Discharge of St. Vrain Creek at Lyons, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	16	3	7	7	9	10	11	36	505	490	177	85
2....	16	3	7	6	9	9	10	39	420	460	165	77
3....	17	3	6	6	8	9	12	36	387	465	136	70
4....	15	3	6	8	9	9	13	33	368	500	126	70
5....	14	3	6	9	9	9	12	36	372	440	136	59
6....	13	3	6	8	9	8	10	46	435	406	126	67
7....	14	4	8	8	9	9	10	70	465	387	121	109
8....	15	4	9	9	10	9	10	74	505	425	116	105
9....	16	3	9	9	10	6	10	76	535	396	107	92
10....	16	6	9	9	9	5	10	83	617	364	98	69
11....	16	7	10	11	8	6	9	98	685	430	87	62
12....	16	8	8	12	9	8	9	134	819	387	83	64
13....	16	7	8	9	9	8	8	162	871	337	77	58
14....	16	8	9	9	8	10	8	219	954	337	69	59
15....	16	11	10	11	6	12	11	252	1030	333	77	58
16....	18	13	10	11	6	9	15	215	936	277	87	53
17....	23	13	10	10	6	7	25	198	654	260	123	52
18....	23	11	9	9	7	9	22	690	520	281	118	50
19....	25	10	9	7	9	11	25	617	515	285	100	47
20....	25	9	10	7	9	11	32	455	638	315	96	46
21....	24	11	9	5	11	9	37	392	724	319	90	43
22....	23	10	10	6	11	10	42	455	633	285	94	43
23....	20	10	8	8	11	10	31	724	628	281	72	39
24....	17	12	9	9	9	10	42	654	607	241	79	35
25....	14	9	9	10	8	10	34	597	581	226	107	32
26....	15	9	8	10	9	10	23	566	545	212	100	42
27....	7	6	9	9	11	10	29	602	540	204	94	54
28....	5	6	9	10	10	9	31	581	535	201	85	47
29....	5	6	8	9	...	11	27	515	485	194	79	56
30....	4	8	7	8	...	11	34	556	505	212	74	48
31....	4	...	7	8	...	10	...	566	...	201	70	...
Total	484	219	259	267	248	283	608	9777	18014	10151	3169	1791
Mean.	15.6	7.30	8.35	8.61	8.86	9.13	20.3	315	600	327	102	59.7
Max..	25	13	10	12	11	12	42	724	1030	500	177	109
Min...	4	3	6	5	6	5	8	33	368	194	69	32
Acre-ft.	960	434	514	530	492	561	1210	19390	35730	20130	6290	3550

Total run-off for water year 1934-35=89,790 acre-feet.

Discharge of St. Vrain Creek at Lyons, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	34	23	9.4	3.2	9.4	8.2	13	174	716	401	280	90
2....	30	23	7.6	5.8	9.4	8.8	14	161	616	361	303	86
3....	27	18	8.2	7.0	8.8	9.4	15	180	594	327	460	108
4....	23	25	8.2	8.2	9.4	11	18	254	554	327	554	101
5....	23	21	10	5.8	10	15	17	303	510	317	406	82
6....	22	28	16	5.8	9.4	15	16	341	346	280	346	80
7....	20	30	15	7.0	8.8	16	17	285	332	285	312	74
8....	19	29	10	6.4	9.4	16	23	238	466	246	276	71
9....	11	27	9.4	5.8	7.6	16	27	195	588	262	229	68
10....	7.6	25	11	7.0	8.8	19	31	206	651	308	246	63
11....	5.8	16	13	8.2	10	15	39	198	576	366	254	68
12....	5.8	22	14	8.8	10	16	63	213	668	538	233	60
13....	5.8	24	14	10	11	16	103	250	746	444	229	54
14....	5.8	24	5.2	10	12	17	113	313	740	327	195	45
15....	15	19	1.8	10	11	14	92	460	740	290	180	59
16....	21	18	1.7	11	10	11	110	576	740	267	164	65
17....	25	21	1.9	7.6	10	14	134	565	710	267	145	65
18....	26	21	2.2	8.8	8.8	15	145	499	674	290	161	63
19....	26	19	2.2	8.2	9.4	14	177	510	680	258	148	60
20....	25	13	2.2	8.2	9.4	14	238	532	576	233	123	57
21....	26	16	2.2	9.4	9.4	13	213	510	538	213	110	57
22....	25	19	2.4	8.8	9.4	16	191	516	521	202	120	56
23....	25	20	2.6	8.8	11	19	233	482	516	195	115	54
24....	24	19	2.8	8.8	9.4	15	254	466	526	177	103	63
25....	25	17	2.6	6.4	7.6	21	272	510	571	180	92	57
26....	25	16	3.8	8.2	7.6	19	267	622	571	184	88	60
27....	27	14	8.8	7.6	7.6	15	258	645	565	170	86	73
28....	25	10	5.8	6.4	7.6	18	229	668	532	242	101	80
29....	25	15	5.8	7.6	7.6	17	238	634	565	327	88	60
30....	25	13	8.2	7.6	...	16	213	628	494	294	82	63
31....	22	...	4.6	9.4	14	14	692	...	258	82	...	...
Total	651.8	605	212.6	241.8	269.8	463.4	3773	12826	17622	8836	6311	2042
Mean.	21.0	20.2	6.86	7.80	9.30	14.9	126	414	587	285	204	68
Max...	34	30	16	11	12	21	272	692	746	538	554	108
Min...	5.8	10	1.7	3.2	7.6	8.2	13	161	332	170	82	45
Acre-ft.	1290	1200	421	480	535	919	7480	25440	34950	17530	12520	4050

Total run-off for water year 1935-36=106,815 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

**Discharge of St. Vrain Creek at Mouth Near Platteville, Colorado, for Year Ending
September 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	17	32	30	24	30	38	24	35	1240	143	58	82
2....	16	30	32	24	31	40	22	32	980	129	52	72
3....	18	32	31	24	30	42	22	31	768	120	58	65
4....	17	30	31	25	29	36	20	36	605	137	64	61
5....	19	31	32	25	29	33	20	35	520	141	68	57
6....	21	31	30	25	30	32	17	31	488	99	58	52
7....	20	32	29	25	30	30	17	30	700	75	49	91
8....	20	32	30	26	30	28	16	32	931	65	51	272
9....	20	33	22	25	34	28	16	34	889	62	47	252
10....	21	33	33	25	36	28	20	33	875	61	43	156
11....	22	35	32	22	34	28	17	31	1110	58	42	133
12....	24	34	31	25	34	28	16	32	1450	68	46	111
13....	27	32	30	24	36	28	15	42	1470	190	46	102
14....	28	32	30	22	32	26	16	76	1480	137	44	97
15....	31	31	29	23	32	25	16	90	1760	120	42	96
16....	31	29	29	26	33	25	16	62	1960	97	50	86
17....	31	30	28	25	33	26	16	47	1620	90	65	86
18....	28	29	27	25	32	27	17	232	605	96	76	88
19....	28	29	27	25	30	28	17	2020	246	116	72	82
20....	29	32	25	25	29	27	16	1180	133	131	58	71
21....	27	33	25	24	26	25	16	625	127	153	56	69
22....	26	31	26	24	24	25	14	428	213	216	56	69
23....	32	31	25	24	24	25	12	655	216	169	49	68
24....	31	32	24	22	26	25	21	1120	261	147	92	64
25....	27	32	24	22	25	25	20	60	796	208	109	115
26....	25	30	24	22	26	24	85	620	185	88	104	73
27....	28	30	24	24	27	25	71	496	131	76	88	111
28....	31	31	24	24	35	25	46	1210	120	73	96	160
29....	31	29	24	25	...	25	36	1600	127	71	99	143
30....	34	28	24	26	...	24	35	1310	137	62	97	116
31....	32	...	24	28	...	25	...	1310	...	64	106	...
Total	792	936	866	755	847	876	752	14311	21555	3363	2047	3053
Mean.	25.5	31.2	27.9	24.4	30.2	28.3	25.1	462	718	108	66.0	102
Max..	34	35	33	28	36	42	85	2020	1960	216	115	272
Min..	16	28	24	22	24	24	12	30	120	58	42	52
Acre-ft.	1570	1860	1720	1500	1680	1740	1490	28390	42750	6670	4060	6060

Total run-off for water year 1934-35=99,490 acre-feet.

**Discharge of St. Vrain Creek at Mouth Near Platteville, Colorado, for Year Ending
September 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	108	81	88	...	...	86	103	142	168	136	153	91
2	105	85	83	...	...	83	103	142	158	116	144	87
3	103	86	85	...	...	81	106	126	332	104	235	93
4	94	82	93	...	...	79	99	124	349	109	684	101
5	94	85	97	...	...	78	97	108	672	124	530	106
6	92	86	90	...	...	76	96	94	386	113	438	89
7	88	91	91	...	...	73	99	134	268	96	324	85
8	86	90	96	...	...	68	96	206	217	96	246	75
9	85	90	89	...	...	66	85	222	198	100	204	75
10	80	89	85	...	...	66	81	194	624	112	178	72
11	76	84	86	...	...	65	76	239	1340	133	153	73
12	76	86	87	...	...	68	76	209	973	202	148	74
13	76	85	90	...	...	67	79	180	840	231	164	72
14	76	81	88	...	...	67	87	166	847	151	166	72
15	76	79	74	...	...	65	103	168	959	120	122	71
16	79	80	74	...	...	63	103	174	1030	106	103	75
17	93	91	74	...	...	62	100	182	1190	104	99	81
18	103	103	74	...	...	63	109	158	952	105	96	80
19	93	105	74	...	...	68	114	125	702	110	98	79
20	89	101	74	...	...	68	112	98	585	104	103	80
21	85	94	74	...	...	64	131	78	434	106	174	89
22	84	81	74	...	...	62	134	72	335	108	180	81
23	85	78	*74	...	...	66	142	66	251	106	182	77
24	86	81	74	...	...	70	144	79	196	100	184	75
25	89	86	74	...	...	73	138	103	141	101	172	73
26	92	91	74	...	*135	76	153	76	114	114	164	80
27	85	96	74	...	...	83	155	79	103	128	168	116
28	80	99	74	...	...	92	157	113	104	130	110	160
29	78	89	74	...	...	85	108	162	146	106	144	97
30	78	90	74	*86	...	99	162	106	125	162	93	217
31	79	...	74	...	...	103	...	116	...	144	93	...
Total	2693	2645	2506	...	...	2308	3402	4225	14699	3815	6005	2855
Mean	86.9	88.2	80.8	...	...	74.5	113	136	490	123	194	95.2
Max..	108	105	97	...	...	108	162	239	1340	231	684	256
Min..	76	78	74	...	...	62	76	66	103	96	93	71
Acre-ft	5340	5250	4970	4920	4600	4580	6750	8380	29160	7570	11910	5600

Total run-off for water year 1935-36=99,090 acre-feet.

*Discharge measurement

Discharge of Left Hand Creek at Mouth at Longmont, Colorado, for Year Ending Sept. 30, 1935												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	4	1	2	2	2	1	1	1	109	10	7	6
2....	3	1	2	2	2	1	1	1	96	10	6	6
3....	3	1	2	2	2	1	1	2	85	7	6	5
4....	3	1	2	2	2	1	1	2	72	10	6	5
5....	2	1	2	2	1	1	1	2	63	7	6	4
6....	2	1	2	2	1	1	1	2	51	7	5	4
7....	2	1	2	2	1	1	1	2	52	7	5	4
8....	2	1	2	2	1	1	1	3	48	8	4	3
9....	1	1	2	2	2	1	1	1	40	8	3	3
10....	1	1	2	2	2	1	1	1	24	10	3	3
11....	1	1	2	1	1	1	1	2	38	11	3	10
12....	1	1	1	2	1	1	1	3	42	8	3	9
13....	1	1	1	2	1	1	1	3	32	7	3	8
14....	1	1	1	2	1	1	1	4	29	8	3	8
15....	1	1	1	2	2	1	1	3	38	10	3	7
16....	1	1	1	1	2	2	1	1	2	35	9	3
17....	1	1	1	2	2	1	2	2	13	11	3	6
18....	1	1	2	2	1	1	1	100	8	16	4	6
19....	1	1	2	2	1	1	1	190	8	18	3	5
20....	1	1	2	2	1	1	1	150	8	21	2	5
21....	1	1	1	2	1	1	1	126	8	29	3	6
22....	1	1	1	2	1	1	1	123	10	29	3	5
23....	1	1	2	2	1	1	1	223	11	20	3	4
24....	1	2	2	2	1	1	2	209	14	17	4	3
25....	1	2	2	2	2	1	2	185	20	14	4	6
26....	1	2	2	2	2	1	2	163	17	13	4	8
27....	1	2	2	2	1	2	1	140	16	11	6	18
28....	1	2	2	2	1	2	1	138	17	15	6	14
29....	1	2	2	1	...	1	2	123	16	11	4	9
30....	1	2	2	1	...	1	2	121	16	9	3	7
31....	1	2	1	...	1	...	1	118	8	4	...	...
Total	44	37	54	55	41	31	38	2147	1036	379	125	256
Mean.	1.42	1.23	1.74	1.77	1.46	1.00	1.27	69.3	34.5	12.2	4.03	8.53
Max...	4	2	2	2	2	1	2	223	109	29	7	32
Min...	1	1	1	1	1	1	1	1	8	7	2	3
Acre-ft.	87	73	107	109	81	61	75	4260	2050	752	248	508

Total run-off for water year 1934-35=8,411 acre-feet.

Discharge of Left Hand Creek at Mouth at Longmont, Colorado, for Year Ending Sept. 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	6.9	6.6	4.5	...	5.5	4.5	6.9	11	10	30	41	15
2....	6.9	7.8	3.9	...	5.5	4.2	2.6	9.8	10	25	34	15
3....	6.9	6.6	3.9	...	5.5	2.6	3.3	8.4	25	20	43	16
4....	6.9	7.5	3.9	...	5.5	2.4	2.0	7.2	30	15	60	18
5....	7.2	7.8	3.9	...	5.5	2.4	4.5	31	†38	15	88	14
6....	6.9	7.8	4.5	...	5.5	2.0	3.6	25	34	*13	60	12
7....	6.9	8.1	3.6	...	5.5	2.2	3.9	37	34	8.7	70	9.8
8....	6.6	9.0	3.9	...	5.5	2.0	4.5	47	32	10	60	8.1
9....	6.9	9.8	3.9	...	5.5	1.8	4.8	40	30	8.4	50	8.7
10....	6.6	9.0	6.9	...	5.5	1.6	3.3	45	46	6.0	40	9.4
11....	6.3	7.5	4.5	...	5.5	2.0	3.6	62	150	10	30	8.1
12....	6.6	7.2	4.5	...	5.5	1.4	4.8	62	†136	18	20	8.7
13....	6.0	7.5	3.6	...	5.5	1.4	6.3	70	120	16	10	7.8
14....	5.4	6.9	3.3	...	5.5	1.4	5.7	64	100	8.7	13	8.1
15....	6.0	6.0	4.0	...	5.5	1.4	6.6	63	90	9.0	9.4	7.5
16....	6.9	9.0	4.0	...	5.7	1.6	6.0	62	85	12	8.1	8.4
17....	8.4	6.6	4.5	...	5.7	1.2	6.3	48	*85	12	8.1	9.4
18....	2.5	5.1	*5.1	...	5.7	1.8	6.9	40	70	17	9.8	10.0
19....	7.8	4.8	5.1	...	5.7	1.8	6.0	21	*66	18	11	8.7
20....	8.1	4.8	5.1	...	5.7	1.4	14	9.4	60	11	11	11
21....	6.9	5.7	5.1	...	5.7	1.6	19	30	55	16	9.8	11
22....	7.8	6.0	5.1	...	5.7	1.6	6.6	24	50	18	8.4	11
23....	7.8	6.3	5.1	...	5.7	2.2	6.3	13	45	14	9.0	10
24....	7.8	6.6	5.1	...	*5.7	2.0	6.0	18	40	11	8.4	9.4
25....	8.4	5.7	5.1	...	5.7	2.0	7.2	14	30	12	6.9	5.7
26....	8.4	5.4	5.0	...	5.5	3.9	9.8	11	20	19	7.5	9.4
27....	7.8	4.5	5.0	...	5.5	3.0	8.4	11	10	16	9.8	14
28....	6.0	3.3	5.0	...	5.0	3.9	13	11	10	16	15	20
29....	6.3	4.2	5.0	*5.4	4.5	3.9	10	8.4	10	18	16	30
30....	6.6	4.5	5.0	...	...	3.9	9.8	9	30	27	18	35
31....	6.3	5.0	5.0	...	...	3.6	10	...	40	16	...	...
Total	217.8	197.6	142.1	...	160.0	72.7	201.7	922.2	1551	489.8	801.2	369.2
Mean.	7.03	6.59	4.58	5.20	5.52	2.35	6.72	29.7	51.7	15.8	25.8	12.3
Max...	8.4	9.8	6.9	...	5.7	4.5	19	70	136	40	88	35
Min...	5.4	3.3	3.3	...	4.5	1.2	2.0	7.2	10	6.0	6.9	5.7
Acre-ft.	432	392	282	320	317	144	400	1830	3080	972	1590	732

Total run-off for water year 1935-36=10,490 acre-feet.

*Discharge measurement. †Staff gage readings.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of Big Thompson River Near Estes Park, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	16					8	34	416	588	317	85
2	36	18					10	37	357	608	278	79
3	32	18					12	38	319	613	252	73
4	31	19					13	38	315	672	229	70
5	28	18					11	36	341	593	207	64
6	27	18					10	37	437	527	195	63
7	26	18					9	38	475	464	184	83
8	24	19					10	40	538	522	181	96
9	24	20					11	42	534	491	172	96
10	23	19					14	48	704	478	155	83
11	22	17	*16				12	68	754	622	144	75
12	22	15					11	176	894	603	134	70
13	22	15					11	228	988	550	132	68
14	22	18					12	256	1090	495	127	64
15	20	17			*11		12	201	1200	418	127	52
16	20	16			*14		16	123	1150	382	132	49
17	20	15					18	96	767	390	175	47
18	20	15					22	168	608	422	146	41
19	22	16					26	159	509	550	129	44
20	21	18					29	128	532	495	122	42
21	19	18					34	123	593	536	117	41
22	20	18					34	165	550	495	115	41
23	18	18					37	234	627	469	115	38
24	14	18					38	266	574	406	120	38
25	17	18					30	323	555	366	141	39
26	17	17					42	388	536	339	136	59
27	18	17					42	449	541	320	120	72
28	17	17					11	43	445	541	302	115
29	17	17					10	37	408	545	320	92
30	16	17					8	34	453	574	398	68
31	15						8	475		374	85	
Total	686	522					648	5720	18564	14808	4777	1887
Mean.	22.1	17.4					21.6	185	619	478	154	62.9
Max..	36	20					43	475	1200	672	317	96
Min..	14	15					8	34	315	302	83	38
Acre-ft.	1360	1040	984	922	666	922	1290	11350	36820	29370	9480	3740

Total run-off for water year 1934-35=97,940 acre-feet.

Discharge of Big Thompson River Near Estes Park, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	36	19					164	772	455	389	135
2	54	26	20					161	619	412	342	128
3	46	31	28					181	545	372	701	138
4	44	30	25					250	490	334	713	128
5	48	44						342	435	299	619	114
6	44	56						359	363	299	568	100
7	38	48						271	376	296	602	98
8	37	50						230	534	278	460	89
9	32	46						196	648	334	380	78
10	31	25						172	701	389	359	78
11	26	19						164	660	551	338	93
12	31	42						196	654	843	326	87
13	30	36						254	731	684	342	82
14	25	19						310	707	540	296	80
15	23	15						421	725	426	271	74
16	31	19					107	501	802	367	250	68
17	36	21	*14				120	506	731	338	240	66
18	34	25					130	435	672	322	247	62
19	36	22					132	475	695	281	240	58
20	31	24					158	551	660	267	247	56
21	26	46					150	568	631	254	247	50
22	23	38					148	562	602	237	211	46
23	24	26					184	518	540	214	196	44
24	30	18					208	562	534	205	172	42
25	34	18					221	648	672	214	164	37
26	36	22			*20	*28	214	713	591	211	153	48
27	34	24					208	719	591	274	150	58
28	32	21			*17		187	684	754	367	150	66
29	26	31					193	643	556	407	145	70
30	26	32					190	748	501	435	128	80
31	24							843		412	132	
Total	1052	910					3000	13347	18492	11317	9788	2353
Mean.	33.9	30.3	17	16	18	24	100	431	616	365	316	78.4
Max..	60	56						843	802	843	713	138
Min..	23	15						161	363	205	132	37
Acre-ft.	2090	1800	1050	984	1040	1480	5950	26470	36680	22450	19410	4670

Total run-off for water year 1935-36=124,070 acre-feet.

*Discharge measurement.

Discharge of Big Thompson River Below Power House Near Drake, Colorado, for Year Ending

Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	22	16	16	24	28	23	60	515	663	382	118
2	43	22	17	18	17	22	20	64	438	718	342	114
3	42	22	13	18	24	30	27	62	404	718	299	110
4	38	17	13	15	21	23	28	57	404	802	271	107
5	35	28	13	18	17	22	30	62	438	651	255	103
6	32	26	14	20	24	22	20	65	552	606	238	110
7	27	24	17	20	18	18	24	70	579	606	226	114
8	29	26	17	20	29	22	20	74	687	645	228	118
9	29	26	17	18	24	24	22	76	796	618	210	124
10	29	27	16	26	22	20	24	81	905	590	192	116
11	29	24	24	20	17	18	19	92	958	712	179	99
12	27	26	20	33	22	23	20	105	1130	764	174	91
13	24	25	22	17	18	34	21	130	1250	693	161	79
14	26	24	25	23	14	34	26	150	1480	568	145	83
15	29	22	26	22	13	34	23	162	1540	520	137	76
16	29	22	20	17	20	23	29	156	1540	451	145	76
17	29	25	21	17	18	21	35	168	1100	451	201	71
18	30	22	16	17	18	20	26	362	856	500	212	69
19	30	23	16	17	22	24	29	356	849	601	168	66
20	29	22	17	20	28	24	35	276	1000	596	150	64
21	28	24	23	22	28	23	42	242	1090	618	142	60
22	28	13	16	19	20	22	42	268	1040	568	134	60
23	27	22	22	21	22	27	42	414	1070	540	131	59
24	26	23	20	18	20	29	51	455	965	459	137	58
25	22	18	15	18	16	22	39	481	920	414	159	57
26	24	13	20	20	25	21	32	535	731	386	174	69
27	24	13	16	27	20	26	68	596	764	365	159	83
28	23	13	25	28	22	23	54	546	724	349	147	91
29	25	13	16	26	20	57	472	699	339	134	96	
30	23	13	20	24	20	22	56	510	675	459	121	91
31	22	18	19	21	21	21	21	562	609	446	117	
Total	902	640	571	634	583	742	984	7709	26099	17416	5870	2632
Mean.	29.1	21.3	18.4	20.5	20.8	23.9	32.8	249	870	562	189	87.7
Max..	44	28	26	33	29	34	68	596	1540	802	382	124
Min..	22	13	13	15	13	18	19	57	404	339	117	57
Acre-ft.	1790	1270	1130	1260	1160	1470	1950	15290	51770	34540	11640	5220

Total run-off for water year 1934-35=128,490 acre-feet.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	86	48	22	18	19	24	24	231	1060	505	456	166
2	81	49	17	21	20	20	24	213	830	465	432	157
3	78	48	21	17	18	26	24	226	706	450	758	160
4	74	48	21	19	23	29	32	292	652	435	817	188
5	74	42	31	17	20	33	24	396	598	405	706	158
6	71	57	32	19	17	30	19	452	505	410	658	146
7	71	62	34	18	21	31	24	358	490	415	739	134
8	68	59	25	17	22	28	33	300	640	400	616	129
9	64	57	22	16	19	31	34	256	837	436	540	118
10	62	49	29	20	17	33	37	231	916	476	485	113
11	56	31	28	17	17	22	45	222	893	575	460	130
12	55	51	23	24	21	25	62	244	865	924	432	127
13	59	47	29	20	17	32	80	297	980	634	460	115
14	56	54	28	21	20	25	92	358	932	485	412	115
15	54	35	15	21	20	21	104	500	964	452	364	107
16	52	38	9.4	22	19	22	118	622	1050	416	332	104
17	64	43	11	25	22	22	149	640	964	432	322	100
18	62	45	19	24	21	25	158	565	893	424	316	96
19	62	39	16	19	22	28	162	570	932	389	306	93
20	59	31	15	16	21	28	200	628	893	358	286	81
21	55	26	21	22	21	30	198	640	810	345	267	81
22	55	31	25	17	20	26	184	634	772	332	237	81
23	50	35	22	19	27	30	220	545	688	300	220	80
24	55	33	23	24	20	18	254	545	676	286	204	78
25	58	30	20	20	24	275	604	886	294	190	76	
26	59	29	27	22	22	26	269	726	778	289	180	75
27	61	27	22	22	20	20	278	778	739	332	180	85
28	61	22	24	18	22	21	264	765	810	452	184	99
29	58	33	25	22	20	28	264	720	726	440	170	102
30	56	27	22	20	25	25	256	879	575	480	160	113
31	45	18	18	24	24	24	1000	1000	476	158		
Total	1921	1226	701.4	615	588	807	3907	15437	24060	13512	12047	3407
Mean.	62.0	40.9	22.6	19.8	20.3	26.0	130	498	802	436	389	114
Max..	86	62	34	25	27	33	278	1000	1060	924	817	188
Min..	45	22	9.4	16	17	18	19	213	490	286	158	75
Acre-ft.	3810	2430	1390	1220	1170	1600	7750	30620	47720	26800	23890	6760

Total run-off for water year 1935-36=155,160 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of Big Thompson River at Mouth, Near La Salle, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	0	1	1	24	16	19	1	1	70	122	16	3
2....	0	1	1	26	16	20	1	1	58	109	8	3
3....	0	1	1	25	16	19	1	1	47	163	5	3
4....	0	2	2	24	14	18	1	1	28	185	5	3
5....	0	6	3	22	14	18	1	1	24	152	7	3
6....	0	6	2	23	16	14	1	1	22	40	8	3
7....	0	6	1	24	14	12	1	1	19	20	6	3
8....	0	5	1	24	14	16	1	2	17	24	5	9
9....	0	6	1	24	17	19	1	1	14	46	5	7
10....	0	7	1	23	17	19	1	1	11	22	4	5
11....	0	8	0	21	17	20	1	2	32	12	3	5
12....	0	8	0	20	17	22	1	1	323	49	4	5
13....	0	5	0	19	18	24	1	1	115	24	4	5
14....	0	1	0	17	16	24	1	1	35	8	3	5
15....	0	1	8	19	16	22	1	2	20	3	3	6
16....	4	1	27	18	14	20	0	1	16	2	3	6
17....	7	1	28	18	14	17	1	1	21	1	3	6
18....	8	1	27	19	15	17	1	2	12	5	5	7
19....	7	1	27	16	16	14	1	70	7	10	5	8
20....	7	1	22	17	17	12	1	328	6	22	3	6
21....	9	1	22	27	14	6	1	260	5	14	3	7
22....	6	1	24	27	14	2	0	220	6	22	2	6
23....	7	1	26	27	15	1	0	210	29	6	2	6
24....	9	1	24	27	14	1	3	282	28	6	3	6
25....	8	1	24	41	15	1	12	328	11	7	3	7
26....	8	1	26	27	16	1	5	260	7	6	2	7
27....	9	1	27	24	19	1	2	200	6	13	2	14
28....	7	1	24	24	18	1	2	145	68	24	2	42
29....	1	1	23	22	22	1	1	128	69	20	2	31
30....	1	1	23	20	22	1	1	112	120	26	2	20
31....	1	...	23	19	22	1	...	96	39	3	..	..
Total	99	79	419	708	439	383	46	2691	1246	1202	131	247
Mean.	3.19	2.63	13.5	22.8	15.7	12.4	1.53	86.8	41.5	38.8	4.23	8.23
Max...	9	8	28	41	19	24	12	328	323	185	16	42
Min...	0	1	0	16	4	1	0	1	5	1	2	3
Acre-ft.	196	157	831	1400	871	760	91	5340	2470	2380	260	490

Total run-off for water year 1934-35=15,250 acre-feet.

Discharge of Big Thompson River at Mouth, Near La Salle, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	14	50	52	33	26	33	31	3.6	7.0	39	24	8.4
2....	12	49	51	29	26	31	30	4.2	7.0	38	21	8.4
3....	12	48	50	29	26	31	32	3.9	20	37	38	8.4
4....	12	51	48	28	26	33	32	3.3	44	37	80	8.7
5....	12	52	48	29	26	33	33	3.9	75	31	85	8.4
6....	11	53	50	27	27	32	33	5.4	134	28	76	8.1
7....	11	54	52	24	26	31	33	6.3	63	16	69	7.5
8....	12	54	49	28	25	30	36	5.4	34	13	75	7.2
9....	12	54	47	28	27	29	21	6.0	56	10	43	7.2
10....	12	54	47	29	28	29	4.8	5.7	240	25	18	7.5
11....	16	52	48	30	28	28	4.8	4.8	84	53	13	7.5
12....	19	51	49	30	26	28	4.5	4.8	52	116	11	7.2
13....	21	52	49	30	29	28	3.9	5.1	44	92	12	7.2
14....	22	51	49	29	28	28	3.6	4.8	57	15	13	7.5
15....	23	51	47	29	26	27	3.9	4.8	45	10	8.1	7.8
16....	24	54	42	29	27	28	3.6	6.0	38	16	6.6	8.4
17....	24	55	41	29	27	29	3.0	6.0	24	24	6.3	8.7
18....	24	56	41	29	28	31	2.8	5.7	9.0	24	7.5	8.7
19....	24	56	38	27	29	33	2.8	5.1	26	20	7.5	8.4
20....	35	55	37	27	30	33	2.8	5.1	23	12	7.5	8.4
21....	52	55	38	27	33	33	2.8	4.8	12	8.4	9.0	8.4
22....	53	54	38	29	34	33	2.8	6.0	16	9.5	10	8.4
23....	55	54	37	29	32	33	2.9	8.1	11	8.7	8.1	8.4
24....	57	54	35	33	30	33	3.3	4.5	9.0	8.4	7.2	8.1
25....	57	53	35	33	30	34	6.9	6.3	15	8.1	7.2	8.1
26....	57	53	35	30	31	36	31	15	25	10	8.1	8.4
27....	56	54	33	29	36	38	18	8.4	14	13	8.4	8.7
28....	52	53	34	27	36	34	6.3	7.8	26	33	8.7	14
29....	51	53	33	26	33	30	4.2	7.0	40	44	9.5	24
30....	51	54	31	26	22	30	2.3	7.0	40	43	9.0	25
31....	51	30	26	22	31	31	2.0	7.0	38	38	8.1	..
Total	944	1589	1314	888	836	970	402.0	181.8	1290	880.1	714.8	281.1
Mean.	30.5	53.0	42.4	28.6	28.8	31.3	13.4	5.86	43.0	28.4	23.1	9.37
Max...	57	56	52	33	36	38	36	15	240	116	85	25
Min...	11	48	30	24	25	27	2.3	3.3	7	8.1	6.3	7.2
Acre-ft.	1870	3150	2610	1760	1660	1920	797	361	2560	1750	1420	558

Total run-off for water year 1935-36=20,416 acre-feet.

**Discharge of Cache La Poudre River at Mouth of Canon Near Fort Collins, Colorado,
for Year Ending Sept. 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	58	36	8	25	32	25	25	181	1560	1530	916	296
2....	60	42	8	23	34	20	18	184	1200	1380	734	292
3....	60	42	7	27	29	27	20	188	990	1420	654	288
4....	56	37	6	18	33	27	22	165	970	1470	634	360
5....	58	45	8	39	54	16	23	146	1010	1310	582	412
6....	51	47	15	32	34	8	23	158	1200	1120	536	412
7....	49	49	15	27	30	19	23	191	1260	1120	492	530
8....	47	49	19	27	29	22	18	195	1390	1340	510	530
9....	45	51	23	32	27	18	25	213	1700	1270	360	412
10....	44	53	29	27	22	20	25	191	1880	1160	300	309
11....	44	51	34	25	18	13	9	228	2300	1470	336	216
12....	39	47	34	25	22	16	12	276	2620	1390	336	162
13....	45	45	34	23	40	27	23	296	2610	1160	318	188
14....	64	44	34	18	36	26	25	390	3240	1000	300	191
15....	62	42	33	12	19	27	26	355	3900	980	280	162
16....	53	42	33	11	11	23	27	318	3870	817	318	138
17....	51	45	29	8	20	15	51	264	2650	766	400	130
18....	51	44	22	6	25	18	62	742	2300	1040	422	122
19....	53	45	30	5	22	20	66	1180	2280	961	370	96
20....	53	45	25	5	15	20	76	881	2600	934	355	87
21....	49	42	29	5	26	20	91	916	2640	1000	412	87
22....	45	40	25	6	15	15	96	961	2510	1290	406	89
23....	44	30	22	11	13	22	98	1290	2530	1050	400	93
24....	45	25	26	22	15	20	105	1120	2300	862	417	87
25....	45	16	23	26	11	23	110	1000	2190	734	380	93
26....	44	8	26	27	10	18	98	1000	1600	620	355	105
27....	45	7	27	29	23	23	105	1050	1720	568	336	127
28....	44	6	32	29	26	23	98	1040	1690	661	332	141
29....	40	7	27	30	...	13	102	1300	1580	726	332	135
30....	42	8	20	29	...	16	141	1280	1620	1400	318	141
31....	40	...	26	25	...	27	...	1630	...	1150	264	...
Total	1526	1090	729	654	691	627	1643	19329	61910	33699	13105	6431
Mean.	49.2	36.3	23.5	21.1	24.7	20.2	54.8	624	2064	1087	423	214
Max..	64	53	34	39	54	27	141	1630	3900	1530	916	530
Min..	39	6	6	5	10	8	9	146	970	568	264	87
Acre-ft.	3030	2160	1450	1300	1370	1240	3260	38340	122800	66840	25990	12760

Total run-off for water year 1934-35=280,540 acre-feet.

**Discharge of Cache La Poudre River at Mouth of Canon Near Fort Collins, Colorado,
for Year Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	115	51	49	...	...	35	29	395	2970	903	631	548
2....	94	56	49	...	...	35	30	360	2130	803	593	541
3....	91	51	49	...	...	35	33	383	1780	714	866	437
4....	89	62	49	...	...	35	42	494	1690	697	932	468
5....	91	72	49	...	...	35	37	672	1760	656	697	437
6....	91	54	49	...	...	36	29	1040	1350	608	608	424
7....	89	69	49	...	...	37	28	785	1140	600	616	406
8....	89	62	49	...	...	40	34	656	1610	556	534	257
9....	84	69	43	...	...	38	40	563	1910	600	578	196
10....	81	60	36	...	...	43	40	500	1840	732	570	244
11....	74	65	44	...	...	30	40	514	1760	1020	570	240
12....	69	48	40	...	...	27	53	521	1770	1540	534	192
13....	65	67	49	...	...	46	69	631	1930	1010	563	131
14....	81	62	43	...	...	40	79	857	1670	830	541	110
15....	81	48	30	...	...	36	89	1190	1800	750	521	99
16....	84	46	27	...	...	29	104	1630	2250	714	395	91
17....	91	56	27	...	...	30	170	1840	2000	639	350	86
18....	96	54	29	...	...	38	211	1770	1940	656	310	84
19....	99	51	29	...	...	38	231	1770	1910	680	310	77
20....	94	42	29	...	...	34	248	2090	1700	600	377	74
21....	94	36	29	...	...	38	265	2060	1650	593	345	77
22....	91	46	30	...	...	40	283	1900	1550	521	320	72
23....	84	51	30	...	...	43	310	1750	1370	468	306	67
24....	84	51	30	...	...	30	301	1840	1200	437	310	67
25....	91	51	30	...	...	33	350	2060	1180	430	310	65
26....	91	51	30	...	...	37	377	2380	1210	449	223	72
27....	67	51	30	...	*34	29	443	2460	1150	455	174	89
28....	62	51	30	*39	...	30	437	2460	1180	623	170	99
29....	62	51	30	...	...	32	430	2390	1140	563	345	104
30....	62	51	30	...	...	34	430	2660	932	639	523	110
31....	54	...	30	...	...	32	...	2830	...	631	548	...
Total	2590	1635	1147	...	...	1095	5262	43451	49472	21117	14675	5964
Mean.	83.5	54.5	37.0	33.2	35	35.3	175	1400	1650	681	473	199
Max..	115	72	49	...	...	46	443	2830	2970	1540	932	548
Min..	54	36	27	...	...	27	28	369	932	430	170	65
Acre-ft.	5140	3210	2280	2040	2010	2170	10440	86180	98130	41880	29110	11830

Total run-off for water year 1935-36=294,450 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of Cache La Poudre River Near Mouth, Near Greeley, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	7	6	33	40	40	11	6	280	14	41	73
2	8	7	5	38	41	44	11	5	320	13	70	51
3	8	8	5	38	39	46	12	5	122	13	69	18
4	7	6	5	36	36	46	11	5	94	12	55	16
5	7	6	5	38	39	47	11	5	80	11	42	14
6	7	7	14	38	40	49	11	5	70	11	13	13
7	7	7	46	38	40	49	11	5	65	14	14	16
8	7	6	47	39	38	46	10	5	63	13	11	52
9	11	8	44	40	41	46	11	5	196	14	12	34
10	8	8	44	39	40	47	10	5	445	18	13	30
11	8	8	45	39	40	49	9	5	912	15	14	30
12	7	7	45	41	41	50	8	6	1370	13	14	26
13	8	8	42	40	42	54	8	7	1180	15	14	21
14	8	8	41	39	39	54	8	7	882	16	12	18
15	8	8	42	39	36	51	7	6	1630	14	11	26
16	7	7	42	41	35	34	6	6	2190	14	11	22
17	7	7	42	34	36	38	6	6	2320	14	12	20
18	6	6	45	33	36	52	5	27	732	14	11	15
19	6	6	44	34	38	42	5	128	180	15	11	15
20	6	6	42	29	39	28	5	182	106	22	10	15
21	7	6	39	32	39	16	5	144	90	14	11	18
22	7	6	42	35	38	14	5	93	66	14	10	22
23	7	6	39	36	38	14	5	94	27	15	10	21
24	8	8	38	35	39	13	6	108	18	19	10	17
25	7	6	39	35	32	12	6	86	16	21	11	17
26	6	6	40	39	34	12	6	73	25	14	10	18
27	6	5	35	39	34	12	6	63	21	14	11	62
28	6	5	36	40	38	12	6	69	15	13	10	99
29	6	5	39	41	11	6	82	15	14	10	93	
30	6	5	36	42	12	6	86	17	18	19	86	
31	7	..	34	40	11	..	..	858	20	60	..	
Total	221	199	1068	1160	1068	1051	233	2187	13607	461	626	978
Mean.	7.13	6.63	34.5	37.4	38.1	33.9	7.77	70.5	454	14.9	20.2	32.6
Max..	11	8	47	42	42	54	12	858	2320	22	70	99
Min... .	6	5	5	29	32	11	5	5	15	11	10	13
Acre-ft.	438	395	2120	2300	2120	2080	462	4340	26990	914	1240	1940

Total run-off for water year 1934-35 = 45,340 acre-feet.

Discharge of Cache La Poudre River Near Mouth, Near Greeley, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	31	75	64	38	66	54	7.8	49	15	15	18
2	75	32	75	58	38	65	49	7.8	40	12	13	19
3	71	37	79	57	35	74	50	6.6	40	12	15	19
4	61	54	85	57	37	77	54	6.6	41	13	16	19
5	35	88	74	58	42	75	62	6.6	268	12	17	19
6	31	87	76	55	39	73	56	5.4	140	11	23	18
7	25	79	75	50	37	70	54	6.0	66	10	20	17
8	22	68	72	50	37	63	63	7.2	39	11	18	19
9	19	76	71	54	37	62	60	7.8	39	11	15	17
10	17	78	72	60	37	61	50	7.2	73	12	14	17
11	15	78	73	63	37	60	51	6.0	60	13	14	17
12	14	80	72	66	37	58	46	6.6	66	15	13	17
13	13	82	71	65	36	58	27	6.6	89	30	15	19
14	12	79	69	64	36	58	11	6.0	83	20	17	21
15	13	80	63	64	38	56	9	5.4	63	42	17	19
16	17	83	57	61	45	55	9	4.2	50	44	16	20
17	17	83	58	60	45	55	7.2	3.0	37	43	15	26
18	20	85	56	56	45	58	10	3.0	7.8	40	16	18
19	19	86	53	55	45	60	7.8	3.0	7.2	33	17	17
20	18	84	54	57	45	60	7.8	4.8	9.0	13	17	16
21	11	89	54	63	50	59	8	4.8	11	11	17	15
22	7.8	97	56	61	50	57	8	6.6	19	12	17	15
23	5.4	93	57	59	57	57	8	9.7	13	13	17	16
24	7.2	87	57	58	66	63	8	11	12	13	17	16
25	19	86	56	57	65	67	8	12	12	14	19	17
26	22	84	56	55	62	66	9	12	12	13	20	44
27	35	83	56	46	67	56	10	4.7	12	15	31	49
28	31	78	59	49	68	53	8.4	129	14	15	46	50
29	29	77	59	39	68	50	8.4	59	17	16	43	38
30	27	77	56	38	..	51	8.4	56	18	15	37	27
31	28	..	57	38	..	54	..	55	..	42	18	..
Total	812.4	2301	2006	1737	1339	189.7	822	519.7	1407	591	605	659
Mean.	26.2	76.7	64.7	56.0	46.2	61.2	27.4	16.8	46.9	19.1	19.5	22.0
Max..	76	97	85	66	68	77	63	129	268	44	46	50
Min... .	5.4	31	53	38	35	50	7.2	3.0	7.2	10	13	15
Acre-ft.	1610	4560	3980	3450	2660	3760	1630	1030	2790	1170	1200	1310

Total run-off for water year 1935-36 = 29,150 acre-feet.

**Discharge of North Fork of Republican River at Colorado-Nebraska State Line for Year
Ending Sept. 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	37	15	67	58	61	88	65	46	275	10	6	52
2....	40	16	70	59	63	90	65	19	168	7	7	47
3....	38	21	72	67	70	100	63	14	149	5	6	70
4....	37	14	80	65	61	96	59	21	119	4	6	68
5....	35	14	74	72	56	94	61	42	110	4	5	65
6....	34	14	74	70	47	82	59	40	98	4	5	30
7....	34	16	68	67	49	82	61	36	92	4	6	54
8....	40	18	72	70	49	76	63	14	90	5	6	74
9....	37	19	72	74	47	78	63	14	88	4	9	84
10....	35	22	70	84	46	78	63	14	76	4	7	58
11....	40	20	65	74	44	76	58	14	72	4	6	56
12....	41	21	67	74	44	76	54	14	168	5	5	54
13....	38	27	76	70	44	74	49	15	135	5	6	54
14....	52	28	72	68	44	74	33	18	86	5	6	49
15....	42	28	70	68	46	72	33	47	59	5	5	46
16....	41	47	72	74	51	68	33	25	63	4	6	40
17....	42	52	74	67	47	68	33	30	86	3	3	36
18....	42	46	70	65	49	70	32	40	67	3	8	34
19....	42	42	65	61	56	70	18	65	56	4	7	33
20....	37	47	67	59	60	70	10	110	58	4	6	24
21....	37	49	68	58	64	70	10	102	61	3	7	27
22....	24	49	67	54	68	72	10	84	47	4	34	28
23....	16	40	61	51	68	72	10	82	58	5	190	25
24....	17	51	56	46	70	70	16	74	42	12	100	20
25....	16	49	51	42	58	72	30	72	25	10	67	14
26....	14	49	49	44	52	68	67	68	42	7	61	36
27....	19	59	47	49	67	68	30	58	88	6	52	32
28....	39	63	54	58	80	68	21	108	47	6	59	28
29....	12	65	56	59	....	68	33	90	46	6	61	24
30....	14	70	56	59	....	68	51	86	32	8	58	25
31....	13	....	56	63	....	68	....	266	....	6	74	....
Total	1005	1071	2038	1949	1561	2346	1253	1728	2603	216	887	1287
Mean.	32.4	35.7	65.7	62.9	55.8	75.7	41.8	55.7	86.8	7.0	28.6	42.9
Max..	52	70	80	84	80	100	67	266	275	56	190	84
Min...	12	14	47	42	44	68	10	14	25	3	5	14
Acre-ft.	1990	2120	4040	3870	3100	4650	2490	3430	5160	428	1760	2550

Total run-off for water year 1934-35=35,590 acre-feet.

**Discharge of North Fork of Republican River at Colorado-Nebraska State Line for Year
Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	22	15	74	59	60	269	61	58	72	5.4	12	9.5
2....	15	16	78	58	60	180	59	50	63	5.4	14	9.5
3....	16	16	76	59	56	63	61	40	84	5.4	74	9.5
4....	17	23	72	54	55	65	67	30	102	4.8	126	10
5....	18	23	76	46	52	59	74	24	172	4.8	33	10
6....	21	24	76	52	58	59	76	27	197	4.8	54	24
7....	27	22	78	68	58	65	82	37	160	3.9	110	10
8....	22	15	76	72	50	63	86	80	82	3.6	61	10
9....	21	18	74	63	52	65	84	112	47	3.9	25	11
10....	21	25	74	56	54	74	78	92	63	3.9	19	14
11....	23	52	74	58	62	68	78	63	61	4.2	14	19
12....	25	56	74	63	60	70	72	36	42	4.2	14	12
13....	24	56	76	52	60	70	72	30	34	4.8	10	39
14....	24	52	67	51	57	72	78	21	39	4.8	8.7	11
15....	24	59	70	52	59	70	80	19	28	5.1	7.5	12
16....	24	61	67	56	60	68	80	21	27	4.5	7.8	12
17....	25	59	63	58	58	68	74	40	22	4.5	8.1	14
18....	27	67	65	52	57	68	68	11	13	4.2	7.5	13
19....	22	65	63	67	62	68	65	10	7.2	4.5	10	14
20....	22	70	63	65	66	68	65	12	5.4	5.1	11	29
21....	23	76	62	59	72	67	65	8.4	5.1	5.7	61	16
22....	22	67	61	65	76	67	65	8.4	4.8	5.4	11	21
23....	18	74	61	70	72	67	65	14	5.1	4.8	8.7	23
24....	16	76	68	65	67	65	65	32	5.4	3.9	8.4	21
25....	17	78	67	56	63	68	58	9.0	6.0	3.9	8.1	22
26....	18	80	70	56	63	70	52	9.0	5.4	3.9	7.8	27
27....	16	80	65	56	61	70	46	7.5	5.1	4.2	8.1	52
28....	14	82	56	60	65	72	49	11	4.8	4.5	8.7	68
29....	14	74	61	63	63	72	61	130	5.4	14	9.0	94
30....	15	72	58	58	....	65	60	207	5.4	39	9.0	59
31....	15	....	58	60	....	61	....	96	....	14	24	....
Total	628	1553	2123	1829	1758	2396	2046	1345.3	1373.1	195.1	790.4	695.5
Mean.	20.3	51.8	68.5	59.0	60.6	77.3	68.2	43.4	45.8	6.3	25.5	23.2
Max..	27	82	78	72	76	269	86	207	197	39	126	94
Min...	14	15	56	46	50	59	46	7.5	4.8	3.6	7.5	9.5
Acre-ft.	1250	3080	4210	3630	3490	4750	4060	2670	2720	387	1570	1380

Total run-off for water year 1935-36=33,200 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Grizzly Creek, Near Walden, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	...	...	...	...	...	...	159	35	14	3.6
2	0	0	...	...	...	...	...	...	134	29	15	3.3
3	0	0	...	...	...	...	...	...	110	25	13	4.3
4	0	0	...	...	...	...	...	...	111	16	10	4.8
5	0	0	...	...	...	...	...	...	118	15	10	4.0
6	0	0	...	...	...	...	...	...	148	13	10	3.8
7	0	0	...	...	...	...	...	...	175	12	10	7.0
8	0	0	...	...	...	...	...	...	201	12	10	11
9	0	0	...	...	...	...	...	...	199	12	11	13
10	0	0	...	...	...	...	...	...	224	14	11	14
11	0	0	...	...	...	...	...	...	232	16	7.5	14
12	0	0	...	*7	...	...	...	...	276	14	6.0	9.0
13	0	2.6	...	...	...	...	...	...	302	11	6.5	6.5
14	0	2.6	...	...	...	...	...	...	260	10	6.0	6.5
15	0	3.1	...	...	...	...	...	...	272	8.5	4.8	7.0
16	0	5.5	...	...	...	...	...	...	272	7.5	11	6.0
17	0	4.3	...	...	...	...	...	...	260	6.0	12	5.0
18	0	3.6	...	...	...	...	...	...	201	15	8.5	4.8
19	0	3.8	...	...	...	...	...	...	145	14	7.0	4.5
20	0	4.3	...	...	...	...	...	...	142	16	6.5	4.3
21	0	...	...	...	...	...	...	...	134	18	4.8	4.3
22	0	...	...	...	...	...	...	...	55	131	18	4.0
23	0	...	...	...	...	...	...	...	68	118	18	4.0
24	0	...	...	...	...	...	...	...	112	111	18	4.2
25	0	...	...	...	...	...	...	...	180	96	13	4.3
26	0	...	...	...	...	...	...	...	197	89	11	6.0
27	0	...	...	...	...	...	...	...	208	77	12	7.2
28	0	...	...	...	...	...	...	...	192	56	9.0	6.0
29	0	...	...	...	...	...	...	...	169	36	9.0	4.8
30	0	...	...	...	...	...	...	...	135	37	9.0	7.5
31	0	...	...	...	...	...	...	...	129	...	9.0	4.5
Total	0	29.8	...	...	...	...	...	...	1445	4846	445	243.8
Mean	0	Nov. 1	...	...	...	...	...	...	May 22	162	14.4	7.86
Max...	0	to	...	...	...	...	...	...	to	302	35	14
Min...	0	20	...	...	...	...	...	...	31	36	6.0	3.3
Acre-ft.	0	59	...	...	...	...	...	...	2870	9610	883	484

Total run-off for period=14,290 acre-feet.

Discharge of Grizzly Creek Near Walden, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	10	...	...	...	...	...	...	383	323	31	96
2	9.0	11	...	...	...	...	...	...	336	331	25	52
3	7.5	13	...	...	...	...	...	...	340	291	20	44
4	7.0	21	...	...	...	...	...	...	365	225	12	67
5	7.0	16	...	...	...	...	...	...	445	225	8.7	62
6	5.5	17	...	...	...	...	...	...	472	216	7.4	47
7	5.0	...	...	...	...	...	...	...	481	174	6.0	46
8	5.0	...	...	...	...	...	...	...	310	141	6.0	43
9	5.0	...	...	...	...	...	...	...	247	133	6.0	34
10	7.5	...	...	...	...	...	...	...	251	141	5.6	28
11	3.1	...	...	...	...	...	...	...	259	142	11	29
12	3.6	...	...	...	...	...	...	...	261	134	72	34
13	3.6	...	...	...	...	...	...	...	277	137	85	41
14	3.3	...	...	...	...	...	...	...	304	131	55	30
15	3.6	...	...	...	...	...	...	...	314	121	25	23
16	4.8	...	...	...	...	...	...	...	359	124	21	18
17	5.0	...	...	...	...	...	...	...	353	123	20	9.6
18	4.5	...	...	...	...	...	...	...	364	103	33	9.2
19	4.5	...	...	...	...	...	...	...	317	87	28	9.6
20	4.5	...	...	...	...	...	...	...	308	72	22	9.2
21	4.5	...	...	...	...	...	...	...	385	314	51	19
22	6.5	...	...	...	...	...	...	...	442	308	54	18
23	9.5	...	...	...	...	...	...	...	525	291	52	16
24	7.5	...	...	...	...	...	...	...	542	275	51	14
25	8.0	...	...	...	...	...	...	...	522	267	51	13
26	11	...	...	...	...	...	...	...	510	277	76	12
27	12	...	...	...	...	...	...	...	480	306	46	16
28	11	...	...	...	...	...	...	...	508	283	38	21
29	10	...	...	...	...	...	...	...	462	283	33	39
30	10	...	...	...	...	...	...	...	512	281	35	46
31	10	...	...	...	...	...	...	...	287	...	48	6.9
Total	209.0	88	...	...	...	...	...	...	4888	9921	3861	761.7
Mean	6.74	Nov. 1	...	...	...	...	...	...	Apr. 21	370	129	24.6
Max...	12	to	...	...	...	...	...	...	to	481	331	85
Min...	3.1	6	...	...	...	...	...	...	30	247	33	5.6
Acre-ft.	415	175	...	...	...	...	...	...	9700	19680	7660	1510

Total run-off for period=41,231 acre-feet.

*Discharge measurement.

Discharge of Little Grizzly Creek Near Hebron, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	12					30	28	174	206	18	1.4
2	0	12					30	31	177	166	16	1.4
3	0	12					30	31	134	130	17	1.4
4	0	13					30	41	198	84	17	1.4
5	1.6	14					32	41	227	58	16	1.4
6	0.8	16					30	41	217	44	16	1.4
7	0.8	40					30	38	246	51	15	23
8	1.2	27					28	38	266	49	15	38
9	1.2	15					28	52	316	34	15	23
10	1.6	14					28	55	422	27	16	17
11	1.6	14					28	55	436	24	9.2	15
12	1.6	14		*7.2			28	41	436	21	9.2	9.2
13	1.6	12					44	44	456	24	9.2	5.0
14	2.2	12					41	38	472	25	8.2	4.0
15	2.2	11					63	38	476	27	6.6	3.2
16	2.2	12					89	38	314	34	4.0	2.4
17	2.8	12					89	34	350	34	4.0	1.9
18	2.8	12					89	41	404	32	3.2	1.4
19	3.8	12					80	26	304	37	3.0	3.5
20	5.3	14					80	18	312	58	3.0	4.0
21	6.8	14					80	16	324	93	3.0	4.0
22	6.8	15					80	17	358	58	3.0	3.5
23	6.8	15					63	18	384	51	3.0	1.9
24	7.8	15					71	34	294	37	3.0	1.9
25	7.8	15					80	61	200	24	2.4	2.2
26	7.8	14					48	143	200	19	1.9	2.2
27	9.2	14					41	215	225	17	1.9	2.7
28	10	13					31	234	244	17	1.4	2.4
29	11	12					34	225	242	19	1.4	2.2
30	11	12					28	160	219	19	1.4	1.9
31	11							164		17	1.4	
Total	129.3	439					1483	2056	9027	1536	244.4	183.9
Mean.	4.17	14.6	9.0	7.0	7.5	14	49.4	66.3	301	49.5	7.88	6.13
Max..	11	40					89	234	476	206	18	38
Min...	0	11					28	16	134	17	1.4	1.4
Acre-ft.	256	871	553	430	417	861	2940	4080	17900	3050	485	365

Total run-off for water year 1934-35=32,210 acre-feet.

Discharge of Little Grizzly Creek Near Hebron, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	18					281	508	45	44	4.3	
2	2.4	16					301	427	40	34	4.3	
3	3.5	18					262	279	34	42	4.6	
4	4.0	22					244	279	21	51	4.6	
5	4.0	20					258	295	20	55	4.3	
6	4.0	18					204	313	13	44	4.6	
7	3.5	22					186	311	13	38	4.6	
8	3.2	20					174	309	14	32	4.3	
9	3.2	18					163	301	14	26	4.3	
10	3.2	18					172	321	14	21	4.9	
11	3.0	17					186	361	34	21	6.5	
12	3.0	18					224	347	163	22	5.5	
13	3.2	18					242	359	139	18	5.2	
14	3.5	17					341	329	112	18	5.5	
15	4.0	18					371	321	80	19	6.5	
16	4.0	19					429	387	73	18	5.5	
17	5.0	25					455	347	51	14	4.6	
18	5.0	26					467	311	44	16	4.9	
19	4.0	28					421	265	44	18	4.9	
20	3.5	26					351	359	242	42	17	4.6
21	5.0	25					293	369	218	32	14	4.6
22	7.1	24					367	411	222	32	12	4.9
23	5.0	24					483	409	191	32	11	4.9
24	4.0	21					359	409	144	31	5.5	4.9
25	7.1	20					421	399	112	23	6.5	7.0
26	11	22					361	421	86	26	7.5	12
27	11	20					357	439	78	22	5.5	7.5
28	14	18					369	421	79	51	4.9	5.5
29	14	18					369	437	91	51	4.6	4.9
30	15	18					291	429	72	43	3.8	4.9
31	17						461		38	4.0		
Total	181.3	612					4021	10345	7905	1396	647.3	159.6
Mean.	5.85	20.4					Apr. 20	334	264	45.0	20.9	5.32
Max..	17	28					to	467	508	163	55	12
Min...	1.9	16					30	163	72	13	3.8	4.3
Acre-ft.	360	1210					7980	20520	15680	2770	1280	317

Total run-off for period=50,117 acre-feet

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Roaring Fork Near Walden, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	6.2	6.8	10	....	....	27	28	66	202	64	16	
2....	6.8	6.8	13	....	....	27	30	46	218	65	15	
3....	6.8	9.4	12	....	....	30	25	30	215	62	15	
4....	7.3	9.4	10	....	....	30	27	26	166	54	13	
5....	6.2	10	12	....	....	30	47	42	123	52	11	
6....	6.8	15	13	....	....	30	52	72	107	50	11	
7....	6.8	15	13	....	....	31	61	99	110	44	26	
8....	6.8	14	13	....	....	28	60	168	106	42	24	
9....	7.3	14	12	....	....	29	52	250	96	39	21	
10....	7.3	14	12	....	....	27	46	225	88	33	16	
11....	6.8	14	12	*12	....	27	47	275	87	37	16	
12....	6.8	12	12	....	....	30	43	325	76	35	12	
13....	7.8	12	12	....	....	38	20	355	71	30	13	
14....	7.8	13	12	....	....	50	17	410	59	29	13	
15....	7.3	12	12	....	....	70	13	447	50	27	13	
16....	8.3	12	12	....	....	72	12	445	42	27	13	
17....	9.4	13	12	....	....	69	12	360	39	30	11	
18....	8.8	14	12	....	....	60	14	300	60	30	10	
19....	9.4	12	12	....	....	40	17	284	65	28	9.9	
20....	9.4	13	12	....	....	42	15	311	72	26	9.9	
21....	9.4	13	12	....	....	42	21	341	80	26	9.9	
22....	9.4	12	12	....	....	47	42	312	99	26	8.3	
23....	8.8	11	12	....	....	44	43	309	79	25	5.7	
24....	8.8	14	12	....	....	34	46	312	65	27	6.2	
25....	7.3	15	12	....	....	27	83	279	59	30	7.8	
26....	6.8	10	12	....	....	30	102	220	50	29	12	
27....	8.3	12	12	....	....	37	124	221	43	26	14	
28....	9.4	12	12	....	....	30	144	246	42	26	14	
29....	9.9	13	12	....	....	26	112	256	42	24	12	
30....	9.9	12	12	....	....	27	26	65	239	59	24	10
31....	9.4	12	12	....	....	28	....	55	58	20	....
Total	247.5	365.4	372	....	....	1130	1475	7271	2728	1087	388.7	
Mean.	7.98	12.2	12.0	12	13	16	37.7	47.6	88.0	35.1	13.0	
Max...	9.9	15	13	....	....	72	144	447	218	65	26	
Min...	6.2	6.8	10	....	....	26	12	26	39	20	5.7	
Acre-ft.	491	725	738	738	722	984	2240	2930	14420	5410	2160	771

Total run-off for water year 1934-35=32,320 acre-feet.

Discharge of Roaring Fork Near Walden, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	10	19	13	....	....	171	508	163	86	30	....
2....	9.6	18	9.6	....	....	159	412	142	78	31	....
3....	9.6	21	9.6	....	....	169	350	125	106	28	....
4....	8.5	22	9.6	....	....	218	297	106	94	27	....
5....	10	20	9.0	....	....	253	248	86	80	26	....
6....	8.5	19	9.6	....	....	286	196	69	70	25	....
7....	7.0	17	....	....	....	208	156	56	64	23	....
8....	6.5	14	....	....	....	167	240	57	60	23	....
9....	8.5	16	....	....	....	135	350	50	55	22	....
10....	8.5	14	....	....	....	101	352	54	51	20	....
11....	12	14	....	....	....	86	328	198	55	23	....
12....	15	20	....	....	....	78	372	188	64	21	....
13....	16	21	....	....	....	116	405	114	57	18	....
14....	15	18	....	....	....	157	390	81	52	18	....
15....	15	18	....	....	....	220	429	69	50	18	....
16....	17	17	....	....	....	281	506	69	45	19	....
17....	17	15	....	....	....	350	479	101	42	18	....
18....	17	13	....	....	....	284	381	100	41	18	....
19....	16	14	....	....	....	270	388	80	41	18	....
20....	15	14	....	....	....	306	347	68	40	18	....
21....	17	25	....	....	....	306	367	66	40	17	....
22....	17	21	....	....	....	303	297	381	63	17	....
23....	20	15	....	....	....	334	257	290	62	32	18	
24....	21	17	....	....	....	310	253	230	64	28	17	
25....	20	17	....	....	....	285	308	246	66	26	16	
26....	22	15	....	....	....	264	376	259	69	26	20	
27....	25	14	....	....	....	253	402	234	81	26	21	
28....	20	13	....	....	....	238	424	202	80	26	24	
29....	19	14	....	....	....	232	419	220	88	26	26	
30....	16	18	....	....	....	200	443	184	85	27	30	
31....	18	....	....	....	....	482	....	78	28	....	....
Total	456.7	513	60.4	....	....	2419	7982	9747	2778	1553	653	
Mean.	14.7	17.1	Dec. 1	....	....	Apr. 22	257	325	89.6	50.1	21.8	
Max...	25	25	to 6	....	....	to 30	482	508	198	106	31	
Min...	6.5	13	....	....	....	....	78	156	50	26	16	
Acre-ft.	906	1020	120	....	....	4800	15830	19330	5510	3080	1300	

Total run-off for period=51,896 acre-feet.

*Discharge measurement.

Discharge of North Platte River Near Walden, Colorado, for Year Ending Sept. 30, 1935												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	14	27	....	....	36	80	111	492	552	113	25
2	8	14	....	....	....	36	80	91	544	504	108	23
3	9	16	....	....	....	36	80	91	392	544	99	23
4	9	16	....	....	....	36	80	72	292	464	85	22
5	10	16	....	....	....	36	82	63	289	384	79	22
6	9	21	....	....	....	32	78	61	380	317	72	20
7	8	23	....	....	....	32	80	91	548	286	69	32
8	8	23	....	....	....	32	80	132	704	261	66	45
9	9	22	....	....	....	32	78	126	853	240	65	51
10	10	22	....	....	....	32	75	150	938	211	60	47
11	10	22	....	*28	....	40	85	221	1060	196	54	41
12	10	22	....	....	....	40	90	240	1220	184	50	34
13	10	21	....	....	....	40	95	275	1350	152	45	29
14	10	20	....	....	....	40	91	254	1430	132	44	29
15	10	21	....	....	....	40	110	190	1530	117	41	27
16	10	21	....	....	....	60	135	150	1520	104	41	26
17	10	25	....	....	....	60	137	157	1340	94	42	25
18	10	27	....	....	....	60	99	168	975	119	47	25
19	11	25	....	....	....	60	94	205	858	126	42	23
20	12	25	....	....	....	60	111	181	858	141	39	22
21	14	24	....	....	....	75	115	130	912	165	35	23
22	15	26	....	....	....	75	141	102	902	237	33	21
23	14	27	....	....	....	75	152	106	880	237	31	20
24	14	37	....	....	....	75	137	152	894	170	32	21
25	14	41	....	....	....	75	108	362	848	124	34	22
26	14	36	....	....	....	80	109	530	660	108	36	30
27	16	34	....	....	....	80	134	650	576	92	36	33
28	16	33	....	....	....	80	126	710	604	82	35	34
29	15	32	....	....	....	80	108	664	664	76	33	34
30	15	29	....	....	....	84	92	480	628	88	32	34
31	14	....	....	....	....	82	....	424	119	27	....	....
Total	352	735	....	....	....	1701	3062	7339	25141	6626	1625	863
Mean.	11.4	24.5	29	27	28	54.9	102	237	838	214	52.4	28.8
Max..	16	41	....	....	....	84	152	710	1530	552	113	51
Min..	8	14	....	....	....	32	75	61	289	76	27	20
Acre-ft.	698	1460	1780	1660	1560	3370	6070	14560	49870	13140	3220	1710

Total run-off for water year 1934-35=99,100 acre-feet.

Discharge of North Platte River Near Walden, Colorado, for Year Ending Sept. 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	34	....	....	....	....	75	934	1500	254	224	43
2	33	41	....	....	....	....	75	817	1460	186	168	44
3	30	40	....	....	....	....	75	840	1020	146	178	43
4	29	36	....	....	....	....	75	952	956	112	211	42
5	29	33	....	....	....	....	75	1130	844	95	194	42
6	28	52	....	....	....	....	100	1260	790	90	154	39
7	28	45	....	....	....	....	100	1240	636	87	148	36
8	27	37	....	....	....	....	100	871	648	95	146	35
9	26	43	....	....	....	....	100	709	817	90	120	34
10	24	47	....	....	....	....	100	604	894	87	103	33
11	23	38	....	....	....	....	500	580	853	247	127	38
12	26	42	....	....	....	....	500	628	871	492	137	41
13	25	46	....	....	....	....	500	722	902	384	135	41
14	25	50	....	....	....	....	500	844	925	247	109	39
15	25	40	....	....	....	....	500	956	930	186	92	38
16	25	46	....	....	....	....	1050	1120	1040	158	82	39
17	27	50	....	....	....	....	1000	1230	1080	156	74	35
18	27	43	....	....	....	....	960	1280	889	250	68	33
19	28	45	....	....	....	....	943	1120	808	205	63	33
20	28	46	....	....	....	....	1080	1070	736	158	61	32
21	29	50	....	....	....	....	1010	1100	684	148	61	32
22	30	54	....	....	....	....	1120	1110	745	131	58	32
23	28	48	....	....	....	....	1320	1060	644	122	55	33
24	29	42	....	....	....	....	1370	966	532	112	50	32
25	30	41	....	....	....	....	1300	1010	508	109	48	31
26	35	44	....	....	....	....	1300	1110	548	109	46	33
27	38	40	....	....	....	....	1140	1200	492	133	43	37
28	37	37	....	....	....	....	1200	1230	408	158	41	41
29	41	37	....	....	....	....	1170	1230	436	156	40	48
30	41	37	....	....	....	....	1160	1260	359	178	40	53
31	33	....	....	....	....	....	1340	1340	183	41	41	41
Total	917	1284	....	....	....	....	20498	31523	23955	5264	3117	1132
Mean.	29.6	42.8	42	32	40	60	683	1017	798	170	101	37.7
Max..	41	54	....	....	....	....	1370	1340	1500	492	224	53
Min..	23	33	....	....	....	....	75	580	359	87	40	31
Acre-ft.	1820	2550	2580	1970	2300	3690	40660	62520	47510	10440	6180	2250

Total run-off for water year 1935-36=184,500 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of North Platte River Near Northgate, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	29	38	54	39	52	70	225	241	785	895	437	94
2....	29	40	54	40	52	72	250	233	945	795	437	92
3....	29	43	52	42	52	76	280	206	765	865	372	83
4....	29	45	51	44	54	78	270	172	535	825	322	76
5....	29	61	50	46	50	80	280	144	444	660	292	72
6....	32	55	52	48	48	78	260	141	488	559	277	66
7....	30	66	51	50	46	76	280	144	652	511	250	90
8....	29	66	49	52	50	74	280	172	855	527	237	147
9....	28	62	50	52	52	72	250	196	1130	527	237	172
10....	28	62	52	50	48	70	196	199	1390	511	229	160
11....	28	61	53	52	48	72	209	229	1640	488	206	126
12....	28	57	54	56	48	80	216	296	1990	503	185	104
13....	29	55	57	50	46	86	224	322	2330	480	172	87
14....	30	62	58	54	44	92	254	355	2580	429	160	79
15....	34	62	59	56	42	90	333	311	2910	466	144	72
16....	32	62	59	54	44	105	422	268	3080	416	144	72
17....	32	60	57	52	48	125	372	245	3420	366	153	68
18....	32	60	56	52	52	110	296	250	2940	379	163	62
19....	30	59	55	48	54	100	241	277	2190	422	163	62
20....	30	58	53	42	58	120	250	301	1690	519	144	53
21....	34	57	52	48	60	145	272	263	1570	511	129	50
22....	35	55	52	50	58	135	317	220	1670	626	123	48
23....	35	52	54	54	56	125	317	202	1560	736	115	48
24....	35	51	59	52	48	160	306	233	1600	600	117	46
25....	34	50	60	50	46	190	216	437	1550	473	126	49
26....	35	48	58	48	52	215	202	698	1380	385	138	59
27....	35	42	56	50	60	225	268	775	1120	333	126	76
28....	34	42	52	52	68	220	277	955	1070	301	115	85
29....	34	46	48	54	....	220	272	1120	1080	277	110	85
30....	35	50	44	52	....	215	250	905	1050	296	99	79
31....	39	....	40	52	....	210	....	688	....	372	97	....
Total	982	1627	1651	1541	1436	3786	8085	11198	46409	16053	6019	2462
Mean.	31.7	54.2	53.3	49.7	51.3	122	270	361	1547	518	194	82.1
Max..	39	66	60	56	68	225	422	1120	3420	895	437	172
Min..	28	38	40	39	42	70	196	141	444	277	97	46
Acre-ft.	1950	3230	3270	3060	2850	7510	16040	22210	92050	31840	11940	4880

Total run-off for water year 1934-35=200,800 acre-feet.

Discharge of North Platte River Near Northgate, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	74	179	100	55	42	94	150	1490	2270	532	532	117
2....	72	189	88	55	46	100	150	1260	2480	429	540	123
3....	70	169	88	55	50	102	155	1240	2150	355	586	117
4....	70	156	90	50	50	112	155	1340	1690	296	706	117
5....	70	138	94	50	50	122	160	1520	1730	258	650	110
6....	72	163	90	50	52	116	160	1650	1530	237	540	99
7....	70	179	84	46	58	112	165	1700	1250	224	502	92
8....	68	166	92	42	58	118	180	1420	1030	229	473	87
9....	66	169	80	42	60	122	220	1130	1050	220	391	85
10....	64	179	95	46	60	140	240	934	1160	241	322	85
11....	61	165	90	50	55	135	300	860	1160	410	296	97
12....	59	140	85	46	52	134	500	824	1140	981	397	126
13....	61	155	85	46	52	132	800	851	1190	860	355	120
14....	59	160	70	48	52	130	1500	981	1200	772	317	110
15....	59	145	55	50	50	130	3000	1040	1180	618	272	94
16....	62	140	60	48	50	132	3980	1170	1290	488	241	85
17....	64	145	60	48	52	135	3390	1490	1470	466	216	83
18....	72	140	48	50	54	130	3070	1640	1330	525	202	76
19....	76	125	48	48	54	135	2840	1520	1140	502	189	72
20....	81	120	50	44	70	145	2700	1420	1060	416	179	72
21....	90	125	52	44	92	135	2410	1420	1000	397	179	70
22....	90	115	58	50	90	125	2120	1480	1060	360	172	68
23....	92	130	62	52	90	123	2310	1470	1020	317	156	68
24....	102	120	60	50	110	130	2360	1340	860	277	141	66
25....	112	125	60	44	102	140	2240	1370	842	258	126	66
26....	135	125	60	44	98	140	2240	1490	1000	263	115	64
27....	160	120	58	46	92	135	1980	1640	851	344	104	74
28....	156	100	60	46	92	140	1880	1880	722	397	99	92
29....	156	95	60	46	90	150	1840	1980	722	397	97	104
30....	156	105	62	44	....	145	1730	1950	706	451	94	117
31....	202	....	55	44	....	155	....	2000	....	502	99	....
Total	2801	4282	2199	1479	1923	3994	44925	43500	37283	13022	9288	2756
Mean.	90.4	143	70.9	47.7	66.3	129	1498	1403	1243	420	300	91.9
Max..	202	189	100	55	110	155	3980	2000	2480	981	706	126
Min..	59	95	48	42	94	150	824	706	220	94	64	64
Acre-ft.	5560	8490	4360	2930	3810	7920	89110	86280	73950	25830	18420	5470

Total run-off for water year 1935-36=332,100 acre-feet.

Discharge of Willow Creek Near Rand, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	0.9	...	...	...	...	...	8.6	19	7.5	14	5.6
2	1.9	1.1	...	...	...	...	...	6.2	18	7.9	11	4.9
3	1.9	0.9	...	...	...	...	...	6.9	11	11	9.0	4.4
4	1.7	0.6	...	...	...	...	...	6.6	7.5	9.4	8.2	4.4
5	1.6	0.6	...	...	...	...	...	3.6	8.6	5.9	8.6	3.3
6	1.6	0.5	...	...	...	...	...	2.7	12	4.6	7.9	2.7
7	0.9	...	...	...	...	...	...	4.1	21	5.9	7.2	7.2
8	0.8	...	...	...	...	...	...	5.2	44	9.8	12	7.5
9	0.6	...	...	...	...	...	...	3.0	64	7.2	11	6.2
10	0.6	...	...	...	...	...	...	1.9	79	11	11	5.6
11	0.5	...	...	...	...	...	...	2.5	97	6.2	8.6	4.9
12	0.5	...	...	...	...	...	...	2.5	129	7.2	6.9	3.6
13	0.6	...	...	...	...	...	...	1.7	137	4.9	7.5	2.7
14	0.8	...	...	...	...	...	...	2.5	145	3.0	6.9	2.7
15	0.8	...	...	...	...	...	...	3.0	142	3.8	6.9	2.5
16	0.8	...	...	...	...	...	19	2.7	149	4.4	7.2	2.2
17	0.8	...	...	...	...	...	15	1.9	149	3.8	10	2.0
18	0.8	...	...	...	...	...	14	4.1	85	4.1	9.4	2.0
19	0.8	...	...	...	...	...	15	5.9	57	3.3	6.2	1.9
20	0.9	...	...	...	...	...	9.4	5.6	45	4.4	4.9	1.7
21	0.9	...	...	...	...	...	7.9	3.6	36	7.2	4.6	1.7
22	0.9	...	...	...	...	...	7.5	3.3	33	11	4.1	1.6
23	0.9	...	...	...	...	...	5.6	4.9	32	7.2	4.4	1.6
24	0.9	...	...	...	...	...	3.8	7.9	33	8.6	4.9	1.6
25	1.0	...	...	...	...	...	1.4	11	22	9.8	4.9	1.9
26	1.0	...	...	...	...	...	1.4	9.8	21	8.2	5.2	2.7
27	1.0	...	...	...	...	...	8.2	11	14	8.2	3.6	8.6
28	1.0	...	...	...	...	...	12	10	12	7.9	3.8	11
29	1.1	...	...	...	...	...	13	13	12	7.9	4.1	9.0
30	1.1	...	...	...	...	...	14	9.4	9.4	19	3.8	7.2
31	0.9	...	...	...	...	...	9.4	...	17	4.6	...	...
Total	31.5	4.6	...	...	...	...	147.2	174.5	1643.5	237.3	222.4	124.9
Mean.	1.02	Nov. 1	...	...	...	...	Apr. 16	5.63	54.8	7.65	7.17	4.16
Max...	1.9	to 6	...	...	...	...	to 30	13	149	19	14	11
Min...	0.5	...	...	...	...	...	...	1.7	7.5	3.0	3.6	1.6
Acre-ft.	62	9.1	...	...	...	...	292	346	3260	471	441	248

Total run-off for period=5,130 acre-feet.

Discharge of Willow Creek Near Rand, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.7	...	...	...	...	...	...	17	107	7.6	36	6.0
2	5.4	...	...	...	...	...	...	16	91	6.9	32	5.7
3	5.1	...	...	...	...	...	...	15	96	5.4	54	5.1
4	4.8	...	...	...	...	...	...	13	54	4.8	44	5.1
5	5.1	...	...	...	...	...	...	13	47	4.2	31	5.1
6	4.0	...	...	...	...	...	...	14	41	4.5	24	4.2
7	3.8	...	...	...	...	...	...	19	36	4.8	23	4.2
8	3.6	...	...	...	...	...	...	22	23	5.4	20	4.2
9	4.0	...	...	...	...	...	...	16	27	8.0	17	4.0
10	3.8	...	...	...	...	...	...	11	31	10	15	4.2
11	3.6	...	...	...	...	...	...	10	30	36	16	5.7
12	3.6	...	...	...	...	...	...	12	24	35	26	5.7
13	3.6	...	...	...	...	...	...	24	16	32	20	4.2
14	3.6	...	...	...	...	...	...	40	14	15	15	3.2
15	4.0	...	...	...	...	...	...	55	13	9.2	13	2.9
16	4.0	...	...	...	...	...	...	60	17	8.0	11	3.4
17	4.0	...	...	...	...	...	...	63	15	9.2	10	2.9
18	4.5	...	...	...	...	...	...	68	13	21	9.7	2.0
19	4.5	...	...	...	...	...	...	62	10	14	9.7	2.0
20	4.2	...	...	...	...	...	51	63	10	8.4	9.2	2.0
21	4.2	...	...	...	...	...	47	71	12	8.4	8.8	2.0
22	4.2	...	...	...	...	...	49	66	22	9.2	8.0	2.1
23	3.4	...	...	...	...	...	38	64	23	9.7	7.2	2.1
24	3.6	...	...	...	...	...	26	65	15	9.7	6.3	1.9
25	4.0	...	...	...	...	...	29	57	14	9.7	5.7	1.8
26	5.1	...	...	...	...	...	24	61	18	9.2	5.4	2.5
27	5.7	...	...	...	...	...	22	79	14	14	4.2	2.5
28	6.0	...	...	...	...	...	21	91	12	31	4.8	2.3
29	7.2	...	...	...	...	...	20	80	10	16	4.8	2.7
30	6.6	...	...	...	...	...	18	71	10	14	4.8	2.9
31	6.0	...	...	...	...	...	84	...	21	5.4	...	...
Total	140.9	...	...	...	...	...	345	1402	865	401.3	501.0	104.6
Mean.	4.55	...	...	...	...	...	45.2	28.8	12.9	16.2	5.49	...
Max...	7.2	...	...	...	...	...	Apr. 20	91	107	36	54	6.0
Min...	3.4	...	...	...	...	...	to 30	10	10	4.2	4.2	1.8
Acre-ft.	279	...	...	...	...	...	684	2780	1720	796	994	207

Total run-off for period=7,460 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of Illinois Creek Near Rand, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.2							26	160	78	17	5.4
2	2.3							18	116	67	13	4.8
3	2.6							14	74	108	13	4.8
4	2.6							14	85	89	11	4.2
5	2.9							14	89	74	10	3.6
6	3.2							16	136	60	10	3.6
7	3.2							17	160	71	9.4	7.7
8	3.6							22	204	60	9.4	8.8
9	3.6							17	241	58	8.3	7.7
10	3.6							23	254	67	7.7	5.4
11	3.6							31	284	82	5.9	3.9
12	3.6							28	324	85	5.4	3.6
13	3.6							33	337	60	4.8	3.6
14	3.6							33	372	50	4.8	3.6
15	3.6							30	436	53	3.6	3.2
16	3.6							36	20	454	43	3.9
17	3.6							20	26	372	38	3.6
18	3.6							17	43	229	41	3.6
19	3.6							25	34	172	28	2.9
20	3.9							26	12	156	28	2.9
21	3.9							17	10	196	31	3.2
22	3.6							17	30	188	36	5.4
23	3.6							18	58	204	22	4.2
24	3.9							16	82	196	16	6.5
25	3.6							13	120	156	13	7.1
26	3.2							13	136	120	14	7.7
27	3.6							20	160	108	14	5.9
28	3.6							20	164	92	12	4.8
29	3.6							25	128	96	12	4.2
30	3.6							30	104	89	31	4.2
31	3.6							152	...	30	4.8	7.7
Total	107.9							313	1615	6100	1471	240.5
Mean.	3.48							Apr. 16	52.1	203	47.5	7.76
Max...	4.2							to 30	164	154	108	1.5
Min...	2.3								10	74	12	3.6
Acre-ft.	214								621	3200	12100	2920
											477	310

Total run-off for period=19,842 acre-feet.

Discharge of Illinois Creek Near Rand, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.5							71	220	41	26	12
2	5.9							74	200	30	28	13
3	5.4							60	176	22	67	11
4	5.4							96	128	28	53	10
5	5.9							180	112	23	36	10
6	5.4							271	96	20	38	10
7	4.8							212	71	20	36	8.6
8	5.4							172	78	18	34	7.1
9	6.5							128	120	18	30	7.1
10	5.9							104	104	18	30	7.7
11	6.5							85	104	25	36	10
12	7.1							100	89	74	58	12
13	7.7							160	116	53	46	9.4
14	5.9							188	120	38	36	7.1
15	4.8							200	140	36	33	6.5
16	5.9							208	176	31	25	5.9
17	5.9							216	148	33	20	5.4
18	5.9							237	120	41	22	5.4
19	7.1							237	104	34	23	5.4
20	7.1							229	250	100	23	4.8
21	6.5							192	276	89	25	4.2
22	5.4							160	254	85	19	4.2
23	5.4							120	229	67	15	4.8
24	5.9							108	208	53	14	4.8
25	5.4							136	204	48	16	3.9
26	6.5							108	229	67	16	3.9
27	8.3							96	241	64	26	6.5
28	12							120	245	55	34	6.5
29	5.9							116	204	60	22	6.5
30	8.0							112	208	55	16	6.5
31	5.5							208	...	22	11	6.5
Total	195.8							1497	5755	3165	859	222.8
Mean.	6.32							Apr. 20	186	106	27.5	7.43
Max...	12							to 30	276	220	74	13
Min...	4.8								60	48	14	3.9
Acre-ft.	388								2970	11410	6280	1690
											1690	442

Total run-off for period=24,870 acre-feet.

Discharge of Illinois Creek at Walden, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	1.0	...	...	...	...	7.2	10	15	21	11	0.1
2	0	1.4	...	...	...	...	6.4	6.0	30	17	11	0.1
3	0	1.4	...	...	...	...	11	3.0	40	19	8.8	0.1
4	0	1.7	...	...	...	...	13	2.8	28	17	9.4	0.1
5	0	1.7	...	...	...	...	15	2.6	21	16	9.4	0.2
6	0	1.4	...	...	...	...	13	3.1	17	21	10	0.3
7	0	1.0	...	...	...	...	17	4.0	15	24	8.4	0.5
8	0	0.7	...	...	...	...	13	3.1	14	27	6.8	0.5
9	0	0.7	...	...	...	...	12	1.8	30	27	4.8	0.5
10	0	0.7	...	...	...	...	8.8	1.0	92	27	4.2	0.6
11	0.1	0.4	...	...	...	...	11	1.0	120	28	37	0.3
12	0.1	0.7	...	*0.3	...	...	17	1.2	157	31	2.8	0.3
13	0.1	0.7	...	...	...	...	21	1.4	195	36	26	0.3
14	0	0.7	...	...	...	...	21	2.3	232	35	1.7	0.2
15	0	0.7	...	...	...	...	17	2.3	250	42	1.5	0.2
16	0	0.7	...	...	...	...	12	1.8	318	39	1.8	0.1
17	0	0.7	...	...	...	...	8.4	2.0	370	38	1.8	0.1
18	0	0.7	...	...	...	...	6.4	2.0	400	43	1.4	0.1
19	0	0.3	...	...	...	...	3.7	2.3	232	56	1.0	0.1
20	0	0.4	...	...	...	...	1.5	2.6	114	42	0.9	0.1
21	0	0.4	...	...	...	...	1.2	2.0	73	39	0.7	0.1
22	0	0.3	...	...	...	...	1.2	1.5	56	53	0.6	0.1
23	0.1	0.3	...	...	...	...	1.4	1.7	58	58	0.6	0.1
24	0.3	0.3	...	...	...	...	1.7	2.8	71	38	0.7	0.2
25	0.4	0	...	...	...	...	2.3	6.4	86	28	0.7	0.3
26	0.4	0	...	...	...	...	3.7	4.2	71	21	0.4	0.1
27	0.4	0	...	...	...	...	6.4	4.8	55	14	0.3	0.1
28	0.4	0	...	...	...	...	7.2	6.4	40	11	0.2	0
29	0.7	0	...	...	...	...	10	10	27	88	0.1	0
30	0.7	0	...	...	...	...	12	11	21	88	0.1	0
31	1.0	...	...	...	...	...	3.1	12	15	0	...	...
Total	4.7	19	...	...	...	...	282.5	119.1	3248	900.6	107.4	5.8
Mean.	0.15	0.63	0.2	0.5	0.7	2.0	9.42	3.84	108	29.1	3.46	0.19
Max..	1.0	1.7	...	...	...	...	21	12	400	58	11	0.6
Min...	0	0	...	...	...	...	1.2	1.0	14	8.8	0	0
Acre-ft.	9.3	38	12	31	39	123	560	236	6440	1790	213	12

Total run-off for water year 1934-35=9,500 acre-feet.

Discharge of Illinois Creek at Walden, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	11	2.8	...	...	...	...	62	170	25	46	2.4
2	0	14	2.8	...	...	...	...	51	207	22	51	2.8
3	0	15	2.7	...	...	...	...	34	219	17	43	3.0
4	2.0	18	2.8	...	...	...	...	25	198	11	77	3.3
5	2.3	12	3.1	...	...	...	...	27	159	8.5	81	2.6
6	2.3	12	2.8	...	...	...	...	30	129	7.0	59	2.2
7	2.3	16	2.8	...	...	...	...	56	96	6.0	51	2.0
8	1.8	32	2.8	...	...	...	...	68	68	5.4	46	1.8
9	1.5	21	2.8	...	...	...	...	64	40	5.1	32	1.8
10	1.4	13	3.4	...	...	...	...	46	35	5.4	25	1.8
11	1.0	8.8	3.7	...	...	...	...	35	34	12	24	2.6
12	1.5	7.6	3.7	...	...	...	...	26	28	18	23	2.8
13	1.2	7.2	3.7	...	...	...	...	23	27	70	27	2.4
14	1.2	6.8	...	...	...	...	...	22	29	79	32	2.8
15	1.5	7.2	...	...	...	...	...	26	33	57	23	2.8
16	1.4	10	...	...	...	...	...	24	35	35	18	2.4
17	1.7	7.2	...	...	...	...	...	27	35	23	16	2.2
18	2.0	8.8	...	...	...	...	...	51	44	19	13	2.0
19	2.6	7.8	...	...	...	...	...	74	41	19	10	1.6
20	4.0	6.8	...	...	...	...	...	75	36	16	9.5	1.4
21	4.2	4.0	...	...	...	...	...	65	36	13	10	1.4
22	3.7	5.2	...	...	...	...	256	74	38	10	10	1.4
23	4.0	4.5	...	...	...	...	248	83	39	10	8.0	1.2
24	4.2	4.0	...	...	...	...	195	83	32	8.0	5.7	1.2
25	6.0	3.7	...	...	...	...	161	90	36	5.4	3.9	1.0
26	7.6	4.2	...	...	...	...	134	86	44	5.7	3.3	1.0
27	8.0	3.4	...	...	...	...	100	94	53	7.5	2.2	1.0
28	8.0	3.4	...	...	...	...	88	146	48	8.5	1.6	1.0
29	7.6	3.2	...	...	...	...	84	172	48	18	1.2	1.0
30	11	3.0	...	...	...	...	72	154	36	35	1.0	1.0
31	8.0	...	...	...	...	...	136	...	40	1.4	...	...
Total	104.0	280.8	39.9	...	...	...	1338	2029	2073	621.5	754.8	57.9
Mean.	3.35	9.36	Dec. 1	...	...	...	Apr. 22	65.5	69.1	20.0	24.3	1.93
Max..	11	32	to 13	...	...	...	to 30	172	219	79	81	3.3
Min...	0	3.0	...	...	...	...	...	22	27	5.1	1.0	1.0
Acre-ft.	206	557	79	...	...	...	2650	4020	4110	1230	1500	115

Total run-off for period=14,467 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Michigan River Near Lindland, Colorado, for Year Ending Sept. 30, 1935

Total run-off for period=24,638 acre-feet.

Discharge of Michigan River Near Lindland, Colorado, for Year Ending Sept. 30, 1936

Total run-off for period=26,322 acre-feet.

Discharge of Michigan River at Walden, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	4.8	.	.	.	.	.	30	16	165	60	90
2	14	5.0	.	.	.	.	.	35	12	125	53	89
3	14	6.5	.	.	.	.	.	40	8.8	63	60	58
4	14	5.2	.	.	.	.	.	40	6.8	32	52	43
5	14	5.5	.	.	.	.	.	40	5.2	28	37	39
6	12	5.5	.	.	.	.	.	45	6.8	39	31	35
7	10	5.2	.	.	.	.	.	50	7.0	72	30	30
8	10	5.4	.	.	.	.	.	50	6.5	96	24	29
9	10	5.8	.	.	.	.	.	45	5.5	147	25	40
10	9.8	6.0	.	.	.	.	.	40	5.0	212	27	44
11	9.8	6.2	.	.	.	.	.	60	6.0	292	26	37
12	9.8	6.2	*	8.7	.	.	.	90	8.4	352	24	35
13	10	5.8	.	.	.	.	.	110	11	402	24	30
14	10	6.0	.	.	.	.	.	165	12	428	21	28
15	10	6.0	.	.	.	.	.	216	12	463	21	28
16	11	6.2	.	.	.	.	.	208	7.0	535	21	30
17	10	6.8	.	.	.	.	.	188	8.0	539	21	30
18	8.0	7.0	.	.	.	.	.	174	9.8	478	20	32
19	8.4	7.7	.	.	.	.	.	125	13	326	28	26
20	8.8	8.4	.	.	.	.	.	58	12	223	23	24
21	7.4	8.8	.	.	.	.	.	57	8.0	201	23	22
22	7.0	9.8	.	.	.	.	.	49	7.4	235	51	20
23	7.0	8.4	.	.	.	.	.	46	7.7	219	74	20
24	6.5	9.1	.	.	.	.	.	40	9.1	212	45	21
25	6.2	9.8	.	.	.	.	.	29	52	188	32	28
26	6.0	7.0	.	.	.	.	.	22	65	159	27	27
27	6.0	7.0	.	.	.	.	.	30	74	132	23	23
28	6.2	6.8	.	.	.	.	.	27	90	118	19	23
29	5.8	6.8	.	.	.	.	.	24	92	89	16	21
30	5.8	6.8	.	.	.	.	.	18	65	69	20	20
31	5.2	...	.	.	.	.	.	80	...	48	22	...
Total	286.7	201.5	.	.	.	.	.	2151	729.0	6669	1006	1044
Mean...	9.25	6.72	8.0	7.5	8.0	18	71.7	23.5	222	32.5	33.7	17.8
Max...	14	9.8	.	.	.	.	216	92	539	74	90	46
Min...	5.2	4.8	.	.	.	.	18	5.0	28	16	20	8.0
Acre-ft.	569	400	492	461	444	1110	4270	1450	13230	2000	2070	1060

Total run-off for water year 1934-35=27,560 acre-feet.

Discharge of Michigan River at Walden, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	38	.	.	.	.	.	195	289	20	75	21
2	14	36	.	.	.	.	.	175	270	18	72	21
3	13	36	.	.	.	.	.	167	241	12	85	20
4	13	31	.	.	.	.	.	182	207	10	90	18
5	14	35	.	.	.	.	.	197	170	9.6	82	18
6	14	32	.	.	.	.	.	227	149	15	80	17
7	14	35	.	.	.	.	.	223	122	13	70	15
8	12	30	.	.	.	.	.	182	75	17	50	14
9	9	30	.	.	.	.	.	149	53	16	52	11
10	11	30	.	.	.	.	.	104	65	21	53	11
11	10	30	.	.	.	.	.	87	76	50	53	16
12	11	35	.	.	.	.	.	78	75	130	70	19
13	11	32	.	.	.	.	.	80	76	154	60	17
14	11	32	.	.	.	.	.	75	78	137	52	16
15	11	28	.	.	.	.	.	74	75	56	46	14
16	14	26	.	.	.	.	.	102	76	37	34	13
17	16	...	.	.	.	.	.	120	110	29	32	9.2
18	16	...	.	.	.	.	.	114	89	36	28	7.1
19	17	...	.	.	.	.	.	112	58	34	26	8.0
20	16	...	.	.	.	.	.	403	116	40	34	24
21	18	...	.	.	.	.	.	360	142	37	34	22
22	19	...	.	.	.	.	.	300	160	38	29	18
23	21	...	.	.	.	.	.	342	142	38	24	17
24	20	...	.	.	.	.	.	338	137	36	20	11
25	24	...	.	.	.	.	.	346	144	32	21	15
26	26	...	.	.	.	.	.	323	160	26	34	15
27	24	...	.	.	.	.	.	280	194	29	36	14
28	26	...	.	.	.	.	.	270	241	35	49	12
29	32	...	.	.	.	.	.	260	274	28	44	12
30	33	...	.	.	.	.	.	230	248	24	42	16
31	32	...	.	.	.	.	.	263	...	49	21	...
Total	535	516	.	.	.	.	.	3452	4864	2717	1230.6	1312
Mean...	17.3	Nov. 1	.	.	.	.	.	Apr. 20	157	90.6	39.7	42.3
Max...	33	to 16	.	.	.	.	.	to 30	274	289	154	90
Min...	9	...	.	.	.	.	.	...	74	24	9.6	12
Acre-ft.	1060	1020	...	...	...	...	...	6850	9650	5390	2440	2600
												833

Total run-off for period=29,843 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Laramie River Near Glendevey, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	14					18	36	224	182	53	15
2	20	17					18	33	205	168	43	14
3	17	17					18	30	213	172	33	14
4	14	17					19	29	241	164	31	15
5	14	16					20	31	322	127	29	13
6	14	15					20	37	346	109	28	12
7	14	15					20	39	395	106	27	32
8	13	15					20	44	490	114	25	36
9	12	14					20	42	572	95	25	20
10	14	13					22	46	593	89	22	15
11	14	12					21	49	635	87	20	16
12	14	12					20	56	645	100	17	14
13	14	10					24	58	731	64	17	14
14	14	13					25	53	774	49	17	14
15	14	15					29	55	925	41	17	17
16	17	15					32	53	909	33	21	17
17	17	16					30	55	763	34	26	17
18	16	17					28	78	531	35	20	23
19	15	17					31	60	455	29	17	27
20	17	16					34	47	420	29	16	27
21	17	19					36	45	415	31	17	29
22	16	18					35	56	375	33	16	23
23	17	16					34	66	341	28	16	23
24	15	16					25	71	317	31	19	23
25	15	18					16	127	312	25	18	26
26	15	15					23	172	241	25	16	28
27	16	13					25	186	228	25	16	35
28	16	11					32	205	228	25	16	33
29	15	12					34	186	209	29	15	32
30	15	15					38	209	190	60	15	32
31	15	...					241	...	92	17	...	...
Total	477	449					767	2495	13245	2231	685	656
Mean.	15.4	15					25.6	80.5	442	72	22.1	21.9
Max..	21	18					38	241	925	182	53	36
Min...	12	10					16	29	190	25	15	12
Acre-ft.	946	891					1520	4950	26270	4430	1360	1300

Total run-off for period = 41,667 acre-feet.

Discharge of Laramie River Near Glendevey, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	29					94	317	62	37	39	
2	28	28					92	232	53	37	32	
3	29	32					129	188	46	59	31	
4	29	31					183	179	38	46	33	
5	29	30					232	177	36	31	36	
6	28	29					240	145	32	27	37	
7	27	31					170	141	30	24	36	
8	26	28					132	168	29	22	34	
9	28	28					99	188	28	21	32	
10	27	28					20	93	186	25	20	
11	25	29					24	104	186	91	22	45
12	28	28					29	124	186	111	24	39
13	29	27					37	152	188	82	19	36
14	29	26					47	195	164	46	20	33
15	29	29					56	234	173	28	18	31
16	29	25					66	286	317	25	17	31
17	31	22					85	286	237	26	17	31
18	31	22					99	272	183	24	17	31
19	32	23					106	288	175	23	21	31
20	32	28					116	294	152	22	38	31
21	32	27					118	291	134	21	40	31
22	28	27					129	263	119	18	35	30
23	31	24					149	244	113	18	27	30
24	31	27					166	234	87	18	24	29
25	28	24					156	252	84	21	21	28
26	30	24					145	272	78	20	33	32
27	31	27					136	311	74	20	35	33
28	30	24					127	323	68	21	35	35
29	28	22					124	297	74	21	34	35
30	29	20					116	302	70	28	33	37
31	29	...					329	...	29	36		
Total	904	799					2051	6817	4783	1092	890	1001
Mean.	29.2	26.6					Apr. 10	220	159	35.2	28.7	33.4
Max..	32	32					to 30	329	317	111	59	45
Min...	25	20						92	68	18	17	28
Acre-ft.	1790	1580					4070	13520	9490	2170	1770	1990

Total run-off for period = 36,380 acre-feet.

Discharge of Laramie River Near Jelm, Wyoming, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	42	31	28	22	26	32	40	65	600	418	121	38
2....	48	34	24	22	25	34	40	65	528	394	108	36
3....	48	34	13	22	24	34	40	54	527	370	85	34
4....	40	32	22	22	25	34	39	46	624	361	76	32
5....	36	34	22	26	28	32	42	50	748	302	74	32
6....	32	36	22	22	32	31	40	56	987	268	70	31
7....	31	36	22	22	32	30	35	65	1060	252	68	31
8....	31	36	22	24	32	30	35	72	1210	256	66	78
9....	34	38	24	26	30	29	34	66	1390	222	66	65
10....	30	36	26	28	28	28	29	72	1410	190	63	48
11....	30	34	24	26	32	28	26	83	1470	187	56	39
12....	30	32	21	26	35	28	31	96	1540	222	56	35
13....	31	32	24	24	30	29	35	105	1600	180	54	32
14....	31	34	28	26	30	32	44	116	1680	148	50	30
15....	31	34	29	25	26	30	38	108	1710	127	48	30
16....	32	32	26	24	25	28	35	96	1740	105	54	31
17....	34	24	22	24	28	28	40	98	1600	98	61	31
18....	35	22	23	23	32	32	34	110	1360	98	56	28
19....	36	22	25	21	34	32	39	130	1120	116	48	31
20....	36	21	26	16	32	34	48	105	1060	110	42	32
21....	35	25	24	21	29	32	61	93	1030	173	40	35
22....	34	26	22	26	28	34	56	110	924	180	40	36
23....	35	26	22	26	28	36	50	160	879	135	40	34
24....	34	24	24	28	28	40	51	177	789	116	42	36
25....	31	18	26	31	22	40	70	244	732	96	48	42
26....	32	16	23	32	26	39	68	352	554	89	44	45
27....	32	15	28	34	30	39	62	481	538	85	39	54
28....	32	14	25	34	32	36	59	543	543	78	36	60
29....	32	13	21	32	....	30	63	501	506	76	38	54
30....	32	18	18	30	....	35	58	527	456	83	38	56
31....	31	....	21	26	....	39	618	....	160	39	....	....
Total	1058	829	732	791	809	1015	1342	5464	30925	5695	1766	1216
Mean.	34.1	27.6	23.6	25.5	28.9	32.7	44.7	176	1031	184	57.0	40.5
Max...	48	38	29	34	35	40	70	70	1740	418	121	78
Min...	30	13	18	16	22	28	26	46	456	76	36	28
Acre-ft.	2100	1640	1450	1570	1600	2010	2660	10840	61340	11300	3500	2410

Total run-off for water year 1934-35=102,400 acre-feet.

Discharge of Laramie River Near Jelm, Wyoming, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	58	68	49	34	38	40	43	244	977	119	92	52
2....	54	58	45	33	40	39	43	225	730	105	119	51
3....	48	58	44	37	41	38	43	268	603	88	225	44
4....	45	61	44	34	42	38	44	386	585	74	189	44
5....	48	65	44	35	42	38	47	488	585	69	122	45
6....	45	72	47	32	42	39	51	568	508	67	90	46
7....	40	66	47	27	41	40	57	429	444	65	78	45
8....	39	66	43	30	40	40	61	357	468	67	71	44
9....	38	65	40	34	39	40	75	298	493	62	62	41
10....	36	65	40	37	38	38	110	276	473	60	58	40
11....	36	70	41	37	37	37	155	264	463	203	57	44
12....	36	89	38	38	37	36	200	330	463	415	57	54
13....	36	78	38	39	38	38	35	230	353	444	232	52
14....	38	74	34	38	38	34	240	429	410	172	48	45
15....	36	72	29	37	38	34	235	551	400	105	46	41
16....	35	70	29	35	37	34	228	683	530	88	43	41
17....	35	74	29	34	37	35	200	779	434	102	41	40
18....	35	61	30	33	37	35	240	722	357	88	40	40
19....	35	68	31	33	37	35	272	754	330	76	40	40
20....	35	63	31	33	37	35	298	806	298	71	46	40
21....	40	70	32	38	37	35	303	815	285	73	56	39
22....	50	61	32	38	38	37	260	762	268	69	56	38
23....	74	61	33	37	41	37	244	714	252	62	46	38
24....	68	60	34	37	42	38	264	714	200	58	40	38
25....	72	56	34	36	43	37	325	754	189	60	38	37
26....	65	54	34	34	43	37	325	806	176	60	35	41
27....	63	53	34	33	42	38	325	878	176	65	44	46
28....	63	60	34	33	42	40	290	941	176	67	46	48
29....	58	54	36	33	40	41	285	806	165	76	45	51
30....	53	52	35	34	....	42	272	833	149	74	44	54
31....	56	....	35	35	43	43	....	905	95	48	....	....
Total	1500	1944	1146	1078	1144	1165	5765	18138	12031	3087	2074	1313
Mean.	48.4	64.8	37.0	34.8	39.4	37.6	192	585	401	99.6	66.9	43.8
Max...	80	89	49	39	43	43	325	941	977	415	225	54
Min...	35	52	29	27	37	34	43	225	149	58	35	37
Acre-ft.	2980	3860	2270	2140	2270	2310	11430	35980	23860	6120	4110	2600

Total run-off for water year 1935-36=99,930 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

ARKANSAS RIVER BASIN

ARKANSAS RIVER AT GRANITE, COLORADO

Location—Water stage recorder in Sec. 31, T. 11 S., R. 79 W., at Granite, just above mouth of Cache Creek.

Drainage Area—431 square miles. Altitude 8,930 feet above mean sea level.

Records Available—May 1, 1897, to September 10, 1899; April 6, 1910 to September 30, 1936.

Maximum discharge observed during period 1897-99, 1910-36; 2,900 second-feet June 16, 1924. Gage height 4.57 feet.

Maximum Discharge—Year 1935; 1,700 second-feet June 14, 1935. Gage height 4.53 feet.

Maximum Discharge—Year 1936; 1,830 second-feet June 26, 1936. Gage height 4.42 feet.

Accuracy—Records considered good except for ice period from December 1, 1934, to March 25, 1935, and from December 17 to March 5, 1936, which are fair and were computed on basis of four and two discharge measurements, temperature records and comparative hydrographs.

Diversions for storage and irrigation above station. Sugar Loaf and Twin Lakes reservoirs on tributaries above station, total capacities 72,120 acre-feet. Ewing ditch, Buske-Ivanhoe Tunnel, Twin Lakes Tunnel and Fremont Pass Ditch bring water from the Colorado River basin to Arkansas River above station. Total diversions for 1936, 37,320 acre-feet.

ARKANSAS RIVER AT SALIDA, COLORADO

Location—Water stage recorder in Sec. 32, T. 50 N., R. 9 E., at Salida. South Arkansas River enters one and one-half miles below.

Drainage Area—1,210 square miles. Altitude, 7,038 feet above mean sea level.

Records Available—April 11, 1895, to October 31, 1903; November 3, 1909, to September 30, 1936.

Maximum discharge observed during period 1895-1903, 1909-36; 5,100 second-feet June 16, 1924. Gage height 7.2 feet.

Maximum Discharge—Year 1935; 4,050 second-feet July 12, 1935. Gage height 7.15 feet.

Maximum Discharge—Year 1936; 3,900 second feet June 22, 1936. Gage height 6.90 feet.

Accuracy—Records considered good.

Diversions for storage and irrigation above station. Flow regulated by storage in Clear Creek Reservoir, capacity 11,444 acre-feet, and as described under Arkansas River at Granite, Colorado.

ARKANSAS RIVER AT CANON CITY, COLORADO

Location—Water stage recorder in Sec. 32, T. 18 S., R. 70 W., in Canon City, just above mouth of Sand Creek and one-quarter mile above Southern Colorado Power Plant.

Drainage Area—3,090 square miles. Altitude, 5,363 feet above mean sea level.

Records Available—May 1, 1888, to September 30, 1936.

Maximum discharge observed during period 1888-1936; 19,000 second-feet August 2, 1921. Gage height 10.7 feet.

Maximum Discharge—Year 1935; 5,990 second-feet July 11, 1935. Gage height 5.25 feet.

Maximum Discharge—Year 1936; 6,120 second-feet July 30, 1936. Gage height 5.07 feet.

Accuracy—Records considered good. Records corrected for ice effect February 3-19, 1936, on basis of one discharge measurement, weather records and comparison with Salida station.

Diversions for irrigation above station. Grape Creek enters from south one mile above station.

ARKANSAS RIVER NEAR PUEBLO, COLORADO

Location—Water stage recorder in Sec. 34, T. 20 S., R. 65 W., at south side Water Works Intake, four miles west of center of Pueblo. Both South Side and North Side Water Works divert above station.

Nearest Tributary—Dry Creek enters one mile below station.

Drainage Area—4,730 square miles. Altitude, 4,675 feet above mean sea level.

Records Available—May 1, 1885, to September 30, 1886; September 19, 1894, to September 30, 1936. A station was maintained nine miles above Pueblo in 1887 and 1889.

Maximum discharge observed during period 1885-87; 1894-1936; 103,000 second-feet; slope measurement, including estimated discharge of Dry Creek, 19,500 second-feet June 3, 1921. Gage height 24.66 feet, gage at Pueblo.

Maximum Discharge—Year 1935; 9,880 second-feet May 18, 1935. Gage height 7.78 feet. Includes 20 sec.-ft. diverted around station in North Side Water Works Intake.

Maximum Discharge—Year 1936; 11,200 second-feet May 24, 1936. Gage height 6.46 feet. Includes 40 second-feet diverted around station in North Side Water Works Intake.

Accuracy—Records considered good except those estimated for November 29, December 2-8, 1934; January 19-25, February 25-27, March 25, 1935, and those for periods of ice effect, December 25-27, 1935; January 26 to February 21, 1936, which are fair. The latter were computed on basis of gage heights, discharge measurements and weather records.

Diversions for irrigation above station. The North Side Water Works diverts considerable water around station, wasting the major portion back to river. Corrections for this diversion published beginning Water Year 1934-35.

ARKANSAS RIVER NEAR NEPESTA, COLORADO

Location—Water stage recorder in Sec. 31, T. 21 S., R. 60 W., at Oxford Farmers' Canal Dam, one and one-quarter miles west of Nepesta. Records corrected for Oxford Farmers' Canal waste 1918-26; not corrected from 1927 to June, 1936. Since June, 1936, records include all river flow above Oxford Farmers' Dam.

Drainage Area—9,130 square miles.

Records Available—September 8, 1897, to October 31, 1903; July 14, 1909, to November 12, 1912; January 1, 1914, to September 30, 1936. From 1918 to June 4, 1921, station maintained at Nepesta.

Maximum discharge observed during period 1897-1903, 1909-12, 1914-36; 180,000 second-feet, slope measurement at point nine miles upstream, June 4, 1921.

Maximum Discharge—Year 1935; 14,700 second-feet May 31, 1935. Gage height 6.00 feet.

Maximum Discharge—Year 1936; 17,150 second-feet July 28, 1936. Gage height 6.50 feet.

Accuracy—Records considered good except for estimated periods, October 5, 6, November 27-30, 1934; April 8-11, 1935; December 3 to February 24, 1936, which are fair. No records December 1 to February 26, 1935.

Diversions for irrigation and storage above station.

ARKANSAS RIVER AT LA JUNTA, COLORADO

Location—Water stage recorder in Sec. 2, T. 24 S., R. 55 W., at East Bridge, in La Junta, just above mouth of King Arroyo. This station has been maintained at several different locations at La Junta, during period of record, and all records are comparable.

Drainage Area—12,200 square miles. Altitude, 4,052 feet above mean sea level.

Records Available—May to August, 1889; December, 1893, to December, 1895; 1899 to 1901; April to October, 1903; August to November, 1908; April, 1912, to September 30, 1936.

Maximum discharge observed during period 1889, 1893-95, 1901, 1903, 1908, 1912-36; 200,000 second-feet, slope measurement, June 4, 1921. Gage height 18.4 feet.

Maximum Discharge—Year 1935; 18,370 second-feet May 19, 1935. Gage height 7.32 feet.

Maximum Discharge—Year 1936; discharge not determined, August 8, 1938. Gage height 8.65 feet.

Accuracy—Records considered good. Discharge estimated November 28 to December 11, 1934; December 31 to January 3, January 20-28, February 26, 1935. Records fair for period of ice effect February 1-23, 1936, and were computed on basis of two discharge measurements and weather records. Discharge September 2-30, 1936, includes flow diverted around station in Canal.

Diversions for storage and irrigation above station.

ARKANSAS RIVER AT LAMAR, COLORADO

Location—Water stage recorder in Sec. 30, T. 22 S., R. 46 W., at highway bridge one mile north of Lamar. Lamar Canal diverts mile above station and at times wastes water to river one-quarter mile below station.

Drainage Area—19,800 square miles. Zero of gage is 3,606.02 feet above mean sea level.

Records Available—May 11, 1913, to September 30, 1936.

Maximum discharge observed during period 1913-36; 165,000 second-feet (slope measurement) June 5, 1921.

Maximum Discharge—Year 1935; 15,500 second-feet May 20, 1935. Gage height 6.40 feet.

Maximum Discharge—Year 1936; 36,300 second-feet May 30, 1936. Gage height 8.90 feet.

Accuracy—Records considered fair 1933-34, except for those below 20 second-feet, which are poor. Records considered good 1935-36, except those for period of ice effect February 10-25, and those for May 14-18, which were estimated, and are fair.

Diversions for irrigation above station.

ARKANSAS RIVER AT HOLLY, COLORADO

Location—Water stage recorder in Sec. 14, T. 23 S., R. 42 W., just above mouth of Wild Horse Creek and 300 feet below highway bridge half a mile south of Holly.

Nearest Tributary—Two Buttes Creek enters one and one-quarter miles upstream.

Drainage Area—25,000 square miles. Altitude, 3,387 feet above mean sea level.

Records Available—October 15, 1907, to September 30, 1936.

Maximum discharge observed during period 1907-36; 136,000 second-feet (slope measurement) October 20, 1908. Gage height 11.0 feet, former datum.

Maximum Discharge—Year 1935; 13,220 second-feet May 27, 1935. Gage height 5.42 feet.

Maximum Discharge—Year 1936; 22,700 second-feet May 30, 1936. Gage height 6.80 feet.

Accuracy—Records considered fair. Discharge estimated February 24-26, August 9-20, 1935. Discharge for period no gage height record January 28 to February 13, 1936, estimated on basis of observers notes.

Diversions for irrigation above station. Flood on August 28, 1935, down Wild Horse Creek closed Holly Drain siphon under Wild Horse Creek causing that portion of Holly Drain above Creek crossing to discharge into Arkansas River above gaging station at Holly, and caused Wild Horse Creek to discharge down the former channel of Holly Drain. Discharge on August 28, 1935, includes part of flow of Wild Horse Creek. After August 29 discharge includes the flow of Holly Drain above siphon crossing Wild Horse Creek.

SOUTH ARKANSAS RIVER NEAR SALIDA, COLORADO

Location—Water stage recorder in Sec. 5, T. 49 N., R. 9 E., three-quarters of a mile above mouth and one and one-quarter miles southwest of Salida.

Drainage Area—208 square miles. Altitude, 7,038 feet above mean sea level.

Records Available—April 1, 1922, to December 31, 1924; June 9, 1929, to September 30, 1936. From April, 1922, to December, 1924, station maintained one-half mile downstream.

Maximum discharge observed during period 1922-24, 1929-36; 1,220 second-feet June 17, 1923.

Maximum Discharge—Year 1935; 673 second-feet June 14, 1935. Gage height 3.88 feet.

Maximum Discharge—Year 1936; 393 second-feet May 18, 1936. Gage height 3.27 feet.

Accuracy—Records considered fair. Discharge estimated November 29 to December 4, 1934; January 20-25, February 25, 26, 28, 1935. Records computed for ice effect December 21-27, 1935; January 3-6, 8, 9, 16-23, 26-28, 1936, on basis of one discharge measurement, gage heights and weather records.

Diversions for irrigation above station.

GRAPE CREEK NEAR WESTCLIFFE, COLORADO

Location—Water stage recorder in Sec. 36, T. 21 S., R. 73 W., at weir one mile above DeWeese Dye Reservoir and three miles northwest of Westcliffe.

Drainage Area—346 square miles. Altitude, 7,800 feet above mean sea level.

Records Available—December 1, 1924, to June 30, 1928; March 25, 1930, to September 30, 1936.

Maximum discharge observed during period 1924-28; 1930-36; about 1,400 second-feet (revised), July 22, 1930. Gage height 4.60 feet, computed by weir formula with overflow estimate.

Maximum Discharge—Year 1935; 328 second-feet June 16, 1935. Gage height 2.87 feet.

Maximum Discharge—Year 1936; 710 second-feet August 7, 1936. Gage height 3.35 feet.

Accuracy—Records considered good except for those estimated July 18-24, 1935, and those for period of ice effect, November 7-30, 1935; March 1-15, and those for June 28, 29 (computed on basis water commissioner reports) and for period of shifting control, August 20 to September 30, 1936, which are fair. No records December 1 to February 29, 1936.

Diversions for irrigation above station.

HUERFANO RIVER AT MANZANARES CROSSING NEAR REDWING, COLORADO

Location—Water stage recorder in Sec. 5, T. 27 S., R. 71 W., at Manzanares Crossing, three and one-half miles southwest of Redwing.

Drainage Area—76 square miles.

Records Available—July 14, 1923, to September 30, 1936.

Maximum discharge observed during period 1923-36; discharge not determined July 27, 1934. Gage height 4.30 feet.

Maximum Discharge—Year 1935; 1,400 second-feet July 28, 1935. Gage height 3.30 feet.

Maximum Discharge—Year 1936; 830 second-feet June 23, 1936. Gage height 2.83 feet.

Accuracy—Records considered good except those for June 10 to August 10, 1935, and those estimated October 26 to November 20, 1934; March 1-5, 9-29, 1935; October 22-31, 1935; March 1-6, 1936, which are fair. No records December 1 to February 28, 1935, and November 1 to February 29, 1936.

Diversions for irrigation above station.

CUCHARAS RIVER AT BOYD RANCH NEAR LA VETA, COLORADO

Location—Water stage recorder in Sec. 24, T. 30 S., R. 69 W., six miles south of La Veta.

Drainage Area—75 square miles.

Records Available—January 1, 1923, to September 30, 1936. Prior to October, 1934, station located two miles downstream. Records not comparable.

Maximum discharge observed during period 1935-36; 275 second-feet May 16, 1936. Gage height 2.40 feet.

Maximum Discharge—Year 1935; 189 second-feet May 25, 1935. Gage height 1.85 feet.

Maximum Discharge—Year 1936; 275 second-feet May 16, 1936. Gage height 2.40 feet.

Accuracy—Records considered fair. Discharge estimated November 21 to December 12, December 19-21, December 31, 1934; January 1, January 17-24, February 25-28, December 19-31, 1935; March 1-5, 1936. No record January 1 to February 29, 1936.

Diversions for irrigation above station.

PURGATOIRE RIVER AT TRINIDAD, COLORADO

Location—Water stage recorder in Sec. 13, T. 33 S., R. 64 W., at foot of State Street, in Trinidad. Stations maintained at various sites but records are comparable.

Drainage Area—742 square miles. Altitude, 5,990 feet above mean sea level.

Records Available—May, 1896, to July, 1899; August to December, 1905; November, 1906, to March 1907; October, 1907, to November, 1912; April, 1916, to September 30, 1936.

Maximum discharge observed during period 1896-99, 1905, 1906-12, 1916-36; 45,400 second-feet September 30, 1904. Gage height 16.6 feet, Commercial Street gage.

Maximum Discharge—Year 1935; 8,560 second-feet July 14, 1935. Gage height 4.00 feet.

Maximum Discharge—Year 1936; 10,860 second-feet July 30, 1936. Gage height 7.03 feet.

Accuracy—Records considered good except for estimated periods from January 20-23, February 26-28, 1935.

Diversions for irrigation above station.

PURGATOIRE RIVER AT NINE MILE DAM NEAR HIGBEE, COLORADO

Location—Water stage recorder in Sec. 32, T. 26 S., R. 54 W., 700 feet above Nine Mile Dam, four miles southwest of Higbee and fifteen miles south of La Junta. Smith Canon enters four miles below station. Datum lowered 0.60 foot October 28, 1934.

Drainage Area—2,900 square miles.

Records Available—October, 1924, to September 30, 1936.

Maximum discharge observed during period 1924-36; 64,500 second-feet (slope measurement) September 15, 1934. Gage height 12.60 feet, present datum.

Maximum Discharge—Year 1935; 16,160 second-feet July 22, 1935. Gage height 7.86 feet.

Maximum Discharge—Year 1936; 10,800 second-feet August 7, 1936. Gage height 6.78 feet.

Accuracy—Records considered good except those for periods of ice effect, December 10, 1935, to January 3, January 6-8, 1936, which were estimated on the basis of one discharge measurement and weather records, and are fair.

Diversions for irrigation above station.

PURGATOIRE RIVER AT HIGHLAND (CARMEN) DAM NEAR LAS ANIMAS, COLORADO

Location—Water stage recorder in Sec. 1, T. 25 S., R. 53 W., at west end Highland Dam situated eleven miles southwest of Las Animas. Tarbox Arroyo enters one-quarter of a mile below station.

Drainage Area—3,320 square miles.

Records Available—October 1, 1931, to September 30, 1936.

Maximum discharge observed during period 1931-36; 33,000 second-feet (slope measurement) September 15, 1934. Gage height 14.00 feet.

Maximum Discharge—Year 1935; 9,050 second-feet September 8, 1935. Gage height 7.00 feet.

Maximum Discharge—Year 1936; 9,200 second-feet August 7, 1936. Gage height 7.05 feet.

Accuracy—Records considered good.

Diversions for irrigation above station.

HOLLY DRAIN NEAR HOLLY, COLORADO

Location—Water stage recorder in Sec. 16, T. 23 S., R. 41 W., 100 yards west of Colorado-Kansas line where Santa Fe R. R. crosses Drain. Cheyenne Creek enters just above station.

Altitude—3,385 feet above mean sea level.

Records Available—January 1, 1924, to September 30, 1936.

Maximum discharge observed during period 1924-36; 1,420 second-feet August 28, 1935. Gage height 10.43 feet.

Maximum Discharge—Year 1935; 1,420 second-feet August 28, 1935. Gage height 10.43 feet.

Maximum Discharge—Year 1936; 540 second-feet September 3, 1936. Gage height 7.23 feet.

Accuracy—Records considered good except those estimated for November 15-18, November 28 to December 4, December 16, 1934; June 9, 10, October 2, 3, 14-20, 1935; February 2, 3, 6-10, 12, 14-17, 19-23, March 2, 1936, which are fair. After flood on August 28, 1935, records include the flow of Wild Horse Creek, but they do not include the flow of the Holly Drain above the point where the Drain crossed Wild Horse Creek just north of Holly. (See Wild Horse Creek.)

WILD HORSE CREEK AT HOLLY, COLORADO

Location—Water stage recorder in Sec. 15, T. 23 S., R. 42 W., one-quarter of a mile southwest of Holly and just above mouth. This flow not included in Arkansas River record at Holly as it enters river below gaging station.

Altitude—3,387 feet above mean sea level.

Records Available—October 1, 1922, to August 28, 1935. (Discontinued.)

Maximum discharge observed during period 1922-35; 22,000 second-feet (slope measurement) August 28, 1935, at point eleven miles above station.

Maximum Discharge—Year 1935; not determined August 28, 1935.

Accuracy—Records considered poor. Flood on August 28, 1935, closed the siphon where Holly Drain crossed Wild Horse Creek causing the drain to back up and discharge into Arkansas River above gaging station at Holly and cut channel into Holly Drain, causing Wild Horse Creek to discharge down former channel of Holly Drain. No flow passed the station on Wild Horse Creek after August 28, 1935.

Discharge of Arkansas River at Granite, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	120	93	70	70	72	79	116	357	1030	1060	269	
2	118	96	68	68	71	76	80	108	432	996	1030	254
3	116	91	67	69	73	78	86	100	494	960	1010	232
4	112	112	66	68	74	76	87	100	494	814	1040	208
5	110	110	65	72	70	70	84	100	580	810	954	182
6	108	108	68	72	68	68	93	110	722	1080	854	185
7	104	112	69	72	70	64	91	114	871	1120	814	258
8	98	110	72	72	71	66	112	130	960	1120	820	299
9	95	106	74	72	70	64	133	125	1100	1150	854	273
10	100	104	76	72	69	66	123	125	1360	1130	842	236
11	98	100	77	72	68	70	87	130	1520	1220	836	192
12	98	98	82	72	68	70	91	136	1210	1200	761	188
13	102	95	88	70	67	70	86	143	1250	1060	472	185
14	104	84	91	72	67	70	104	182	1640	984	441	172
15	98	86	93	72	66	71	106	178	1330	960	398	166
16	95	82	87	70	68	72	120	163	1260	924	420	166
17	93	79	81	68	70	73	110	166	984	900	452	158
18	91	84	75	67	72	74	102	192	1250	930	560	149
19	91	82	72	67	73	75	123	146	1250	930	531	188
20	91	76	75	67	74	76	172	141	1270	954	522	188
21	89	87	76	62	73	77	175	149	1370	960	536	192
22	86	80	78	66	72	78	185	178	1320	1030	536	175
23	86	96	80	72	72	79	182	182	1240	843	517	172
24	84	91	79	78	72	80	178	201	954	650	485	172
25	86	82	74	79	70	82	155	250	1060	575	485	192
26	82	84	72	80	68	84	152	284	1010	531	402	198
27	82	68	72	80	67	86	136	369	972	545	334	203
28	82	87	80	78	67	82	125	428	1090	696	338	175
29	82	93	81	77	....	86	120	432	1100	732	291	215
30	82	76	76	76	....	91	120	394	1080	1080	284	195
31	86	....	70	74	....	96	....	341	....	1040	276	....
Total	2969	2752	2354	2226	1960	2342	3597	5913	31473	28954	19155	6039
Mean	95.8	91.7	75.9	71.8	70.0	75.5	120	191	1049	934	618	201
Max.	120	112	93	80	74	96	185	432	1640	1220	1060	299
Min.	82	68	65	62	66	64	79	100	357	531	276	149
Acre-ft.	5890	5460	4670	4420	3890	4650	7130	11730	62430	57430	37990	11980

Total run-off for water year 1934-35=217,670 acre-feet.

Discharge of Arkansas River at Granite, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	177	83	66	87	79	76	110	1030	973	1270	401	496
2	172	90	65	86	80	78	105	1020	840	1210	450	491
3	164	85	85	88	80	80	109	1030	718	1110	349	430
4	151	83	109	85	78	85	114	1230	887	1160	366	358
5	154	76	90	86	72	83	112	1350	901	1150	366	250
6	156	83	77	86	71	85	105	1420	718	1180	476	223
7	129	90	77	87	68	93	112	1300	655	1180	384	223
8	110	82	76	86	72	94	125	1160	908	630	324	202
9	101	82	73	83	70	96	125	415	1190	636	301	191
10	101	85	69	86	68	98	132	535	1340	630	282	191
11	101	77	70	90	70	82	161	649	1450	785	290	180
12	101	77	69	94	73	83	205	642	853	1160	286	164
13	103	76	70	92	72	90	233	1040	880	1040	384	154
14	101	77	69	92	73	85	264	1250	1010	1100	345	144
15	98	73	67	95	73	79	337	1400	1000	1130	349	138
16	101	74	66	96	73	72	460	1620	1210	1120	397	136
17	101	74	64	96	72	74	529	1610	1180	1110	705	132
18	96	80	65	85	72	80	594	1590	1550	1100	887	132
19	98	77	64	86	70	73	636	1630	1640	1090	996	132
20	103	70	66	86	71	76	673	1510	1650	1040	1090	127
21	100	73	71	86	72	79	661	1450	1500	1050	1090	125
22	98	73	70	86	71	80	758	1490	1530	959	996	123
23	96	121	74	86	72	96	860	1450	1730	518	944	121
24	98	180	78	86	75	101	860	1060	1680	541	916	123
25	93	166	84	85	74	100	908	944	1690	547	880	121
26	98	103	87	85	73	98	937	1040	1780	486	894	121
27	101	70	89	84	73	98	944	996	1700	450	923	123
28	96	72	88	82	74	103	901	966	1570	507	923	136
29	91	70	88	80	75	103	880	901	1500	558	894	141
30	94	67	87	76	....	110	833	1030	1380	420	853	148
31	85	....	88	78	....	112	....	1040	....	358	765	....
Total	3468	2589	2361	2686	2116	2742	13783	35798	37613	27225	19506	5776
Mean	112	86.3	76.2	86.6	73.0	88.5	459	1150	1250	878	629	193
Max.	177	180	109	96	80	112	944	1630	1780	1270	1090	496
Min.	85	67	64	76	68	72	105	415	655	358	282	121
Acre-ft.	6880	5140	4680	5330	4200	5440	27340	71000	74600	54000	38690	11460

Total run-off for water year 1935-36=308,800 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Arkansas River at Salida, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	332	226	217	203	200	175	159	192	462	1810	1460	577
2	328	239	220	206	203	190	157	187	680	1700	1440	596
3	324	242	214	203	206	200	157	192	691	1750	1380	586
4	320	246	212	198	206	195	157	187	759	1660	1520	500
5	305	255	206	214	203	187	159	190	935	1470	1320	452
6	297	255	198	214	200	178	157	192	1200	1730	1160	430
7	249	255	206	209	198	170	166	190	1600	1820	1130	448
8	242	255	212	209	203	178	185	192	1700	1850	1100	625
9	242	252	217	214	190	170	182	200	1900	1860	1190	630
10	236	242	220	214	190	168	195	200	2340	1810	1170	558
11	233	239	230	212	195	168	185	209	2860	1780	1190	452
12	236	239	233	214	190	173	166	214	2360	2030	1130	439
13	236	236	249	203	185	182	166	239	2200	1900	771	439
14	239	233	262	212	182	185	164	246	2830	1700	696	430
15	233	233	266	214	178	195	173	262	3110	1680	620	404
16	230	230	259	214	178	190	173	252	3000	1520	644	408
17	230	230	242	200	178	198	190	249	2020	1440	670	395
18	230	233	233	190	187	192	190	332	2260	1440	869	353
19	230	230	223	195	185	185	182	297	2410	1490	878	328
20	246	214	226	195	190	178	220	216	2590	1470	878	324
21	233	217	233	178	190	168	249	239	2870	1530	890	320
22	233	217	233	195	185	164	259	259	2860	1680	862	316
23	233	217	236	203	178	161	272	301	2820	1590	901	290
24	233	239	226	209	187	161	286	324	2250	1240	856	279
25	233	233	226	214	178	159	269	366	2190	1100	886	305
26	233	220	220	212	168	161	252	462	2180	935	901	379
27	230	214	220	214	170	161	233	601	2040	890	764	481
28	223	217	223	212	175	159	223	675	2050	912	644	452
29	217	220	230	212	175	159	209	722	2010	1020	596	457
30	217	223	220	209	178	168	200	680	1900	1350	615	452
31	220	214	206	175	161	161	486	1420	601	1	1	1
Total	7723	7001	7026	6397	5278	5432	5935	9583	61107	47577	29732	13105
Mean	249	233	227	206	188	175	198	309	2040	1540	959	437
Max...	332	255	266	214	206	200	286	722	3140	2030	1520	630
Min...	217	214	198	178	168	159	157	187	462	890	596	279
Acre-ft.	15320	13890	13940	12690	10470	10770	11770	19010	121200	94370	58970	25990

Total run-off for water year 1934-35 = 408,390 acre-feet.

Discharge of Arkansas River at Salida, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	414	307	230	227	227	214	230	1140	2190	1780	818	968
2	394	321	227	214	236	212	220	1160	1900	1780	866	908
3	383	314	233	225	236	217	212	1160	1630	1610	1080	851
4	349	304	254	212	212	230	217	1470	1590	1600	932	794
5	353	281	281	217	214	222	217	1720	1610	1590	1140	633
6	349	287	263	217	209	220	222	1810	1280	1570	1080	573
7	353	290	260	222	230	227	214	1780	1120	1660	1450	538
8	353	290	257	212	214	230	222	1600	1450	1110	1150	505
9	349	281	251	207	209	230	233	956	1960	932	1050	473
10	335	278	242	227	209	230	220	671	2300	1010	944	456
11	324	269	242	230	217	212	230	1050	2490	980	890	442
12	317	266	242	236	222	207	278	1030	2080	1630	872	456
13	307	275	251	230	220	209	321	1300	1920	1530	932	456
14	304	272	242	230	222	214	346	1760	2080	1390	938	442
15	304	254	222	236	225	207	387	2070	2030	1470	848	379
16	300	251	220	239	222	194	528	2360	2150	1520	788	356
17	314	254	217	233	217	192	588	2500	2250	1440	1010	364
18	310	263	217	220	209	192	717	2520	2420	1430	1210	368
19	300	254	220	209	212	192	752	2490	2550	1580	1410	364
20	314	245	222	220	209	180	872	2490	2530	1390	1550	331
21	321	245	214	227	214	187	860	2220	2330	1360	1640	317
22	314	248	220	227	214	197	926	2340	2470	1350	1570	346
23	324	251	230	227	222	194	1070	2360	2630	920	1400	342
24	328	321	242	225	220	204	1060	2100	2600	770	1290	371
25	324	360	245	222	212	225	1090	1620	2530	836	1240	394
26	324	331	245	222	207	217	1110	1880	2560	758	1240	406
27	342	251	242	217	204	209	1140	1770	2520	660	1320	410
28	338	239	245	217	207	225	1100	1780	2380	776	1350	414
29	331	242	239	220	209	222	1060	1570	2200	908	1420	430
30	328	242	230	204	225	998	1840	2060	782	1300	410	410
31	317	230	212	212	233	203	2030	782	1260	1	1	1
Total	10317	8286	7375	6883	6280	6569	17640	54417	63720	38904	35988	14500
Mean	333	276	238	222	217	212	588	1760	2120	1250	1160	483
Max...	414	360	281	239	236	233	1140	2520	2630	1780	1640	968
Min...	300	239	214	204	204	180	212	671	1120	660	788	317
Acre-ft.	20460	16440	14630	13650	12460	13030	34990	108000	126400	77160	71380	28760

Total run-off for water year 1935-36 = 537,360 acre-feet.

Discharge of Arkansas River at Canon City, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	247	180	267	256	244	222	109	183	493	1390	1420	814
2	247	188	258	256	244	205	100	167	529	1870	1320	649
3	242	197	247	253	236	200	96	175	672	1860	1320	622
4	242	194	244	253	236	202	94	175	740	1770	1330	575
5	233	211	256	267	242	183	92	180	918	1660	1310	518
6	238	214	247	261	247	175	94	208	1180	1650	1180	483
7	214	216	253	256	244	170	90	200	1680	1840	1110	537
8	170	216	258	236	230	180	109	191	1910	1330	1170	642
9	167	222	258	233	216	170	133	188	2100	1830	1430	717
10	164	228	277	230	214	170	138	188	2730	1860	1210	642
11	162	228	283	228	208	154	154	177	3260	2320	1200	562
12	162	228	283	236	197	239	138	183	3290	1740	1240	461
13	177	239	283	253	197	277	116	208	2890	2050	1050	461
14	188	228	286	233	186	293	114	236	3440	1930	831	430
15	191	211	286	230	216	250	102	283	4260	1790	773	414
16	186	191	286	239	208	228	118	274	4210	1630	724	386
17	180	186	270	236	247	222	118	296	3050	1610	807	368
18	180	183	270	239	253	250	172	619	2610	1550	806	331
19	172	183	253	228	244	208	151	584	2850	1600	954	303
20	172	180	264	211	222	186	138	391	2920	1610	1060	299
21	194	180	283	200	219	170	178	325	3340	1700	874	292
22	183	175	280	239	214	149	194	293	3330	1820	927	307
23	186	177	267	270	197	136	216	310	3400	1550	883	303
24	186	186	261	267	230	141	244	352	3020	1340	883	288
25	186	208	261	277	250	121	261	377	2510	1250	1040	292
26	188	197	277	267	253	96	242	437	2490	1050	1070	336
27	194	202	277	258	261	94	247	554	2300	981	874	530
28	188	239	277	261	261	106	242	636	2230	918	857	608
29	183	247	274	267	104	239	733	2230	1030	679	608	
30	175	253	261	256	104	102	211	748	2100	1240	671	615
31	175	247	247	104	104	104	665	665	1400	664	664	
Total	5962	6187	8294	7643	6416	5507	4650	10536	72682	50269	31667	14393
Mean.	192	206	268	247	229	178	155	340	2420	1620	1020	480
Max...	247	253	286	277	261	293	261	748	4260	2320	1430	814
Min...	162	175	244	200	186	94	90	167	493	918	664	288
Acre-ft.	11830	12270	16450	15160	12730	10920	9220	20900	144200	99710	62810	28550

Total run-off for water year 1934-35=444,750 acre-feet.

Discharge of Arkansas River at Canon City, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	605	328	319	319	354	240	218	1180	2360	1740	1200	1050
2	541	332	314	306	345	240	205	1320	2070	1630	1150	922
3	516	359	314	319	286	240	205	1340	1800	1560	1250	880
4	481	359	328	306	232	255	208	1460	1510	1470	1270	864
5	436	364	379	306	232	259	212	1730	1620	1460	1340	751
6	415	364	379	319	240	255	177	1860	1390	1420	2820	661
7	404	384	354	328	236	255	198	1900	1210	1450	2670	639
8	404	369	332	328	236	247	195	1760	1280	1360	2130	626
9	394	364	328	332	270	232	201	1450	1690	939	1640	592
10	379	394	328	336	286	232	201	897	2090	981	1480	553
11	354	409	323	336	306	225	189	998	2340	981	1400	522
12	341	369	323	350	302	215	212	1150	2300	1270	1310	516
13	336	341	332	336	286	205	278	1310	1840	1540	1260	510
14	323	354	319	310	262	198	319	1750	1900	1380	1240	493
15	319	336	298	298	262	215	354	2090	1930	1380	1090	447
16	314	310	298	294	240	218	409	2530	1860	1430	998	436
17	314	310	298	282	222	183	553	2780	2040	1380	1020	409
18	345	319	310	274	212	171	632	2640	1970	1380	1200	431
19	314	319	319	255	229	168	661	2610	2200	1420	1380	420
20	306	306	328	259	262	157	743	2590	2260	1520	1430	409
21	314	294	319	290	259	148	751	2260	2130	1300	1580	364
22	323	290	328	319	274	137	798	2450	2140	1320	1600	354
23	336	314	341	332	278	177	897	2460	2530	1160	1560	364
24	384	310	364	310	270	180	981	2610	2340	798	1480	350
25	399	431	379	290	255	186	1030	2630	2280	806	1380	399
26	379	464	374	310	236	165	1150	2130	2300	806	1320	415
27	379	404	374	310	236	151	1180	2020	2450	705	1570	481
28	384	290	345	323	225	157	1220	1990	2310	713	1280	516
29	359	314	332	314	243	168	1210	1780	2120	1120	1280	510
30	354	328	328	332	171	1200	1970	1990	1380	1310	1310	572
31	336	328	336	174	174	2130	1490	1490	1190	1190	1190	
Total	11788	10429	10335	9659	7576	6224	16787	59775	60250	39289	44828	16456
Mean.	380	348	333	312	261	201	560	1930	2010	1270	1450	549
Max...	605	464	379	350	354	259	1220	2780	2530	1740	2820	1050
Min...	306	298	298	255	212	137	177	897	1210	705	998	350
Acre-ft.	23380	20690	20500	19160	15030	12350	33300	118600	119500	77930	88920	32640

Total run-off for water year 1935-36=582,000 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of Arkansas River Near Pueblo, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	160	117	90	129	104	110	19	148	416	1820	1750	721
2....	117	123	90	104	83	94	25	94	482	1620	1630	901
3....	117	129	90	98	71	87	25	87	677	1520	2070	635
4....	98	148	90	75	68	94	10	141	704	1520	1520	490
5....	104	87	90	123	71	79	1	129	1020	1490	1480	445
6....	98	83	90	117	75	83	9	117	1110	1380	1270	349
7....	141	104	90	123	90	60	5	148	1260	1590	1080	524
8....	110	94	100	110	104	60	24	135	1790	1650	1080	1570
9....	75	83	117	104	90	71	25	117	2030	1620	1110	910
10....	71	79	104	94	79	55	31	123	2490	1660	1180	809
11....	75	98	90	94	83	56	47	117	3030	1660	1020	668
12....	75	110	94	98	64	60	53	94	3410	2140	1630	522
13....	71	104	87	98	64	68	49	123	3010	2250	1050	402
14....	87	98	94	80	58	64	41	181	2820	2020	580	402
15....	110	83	104	117	56	56	38	269	3610	1890	460	356
16....	104	83	104	110	98	53	26	261	4090	1760	382	323
17....	94	87	110	110	64	49	40	361	3470	1580	395	291
18....	87	83	117	98	87	60	90	3370	2520	1540	687	266
19....	90	104	123	80	87	55	123	1010	2870	1540	614	242
20....	87	94	110	60	104	42	64	597	2850	1540	571	212
21....	90	75	90	80	129	22	64	498	2980	1840	935	172
22....	154	71	110	100	117	18	110	482	3140	2000	597	192
23....	135	68	98	100	98	12	123	530	3110	2150	514	212
24....	148	58	123	100	90	14	216	580	2950	1530	580	202
25....	148	68	123	150	75	11	223	623	2340	1240	1040	153
26....	141	87	100	223	75	20	160	563	2200	1050	1220	197
27....	129	90	195	261	100	27	154	686	2080	818	1060	362
28....	129	71	104	246	141	24	160	1040	2010	695	1100	530
29....	148	60	117	135	....	20	188	704	1980	704	751	474
30....	129	90	141	135	....	20	209	640	1910	920	892	445
31....	110	....	135	135	....	14	....	563	....	1570	686	....
Total	3432	2729	3320	3687	2425	1548	2352	14531	68359	48287	30334	13977
Mean	111	91.0	107	119	86.6	49.9	78.4	469	2280	1560	979	466
Max..	160	148	195	261	141	110	223	3370	4090	2250	2070	1570
Min..	71	58	90	60	56	10	1	87	416	695	382	153
Acre-ft.	6810	5410	6590	7310	4810	3070	4670	28820	135600	95780	60170	27720

Total run-off for water year 1934-35=386,760 acre-feet.

Discharge of Arkansas River Near Pueblo, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	400	351	344	172	194	107	83	775	2060	1780	1650	1120
2....	407	351	287	210	158	127	109	934	1960	1550	1470	894
3....	386	379	293	210	152	122	69	966	1580	1520	1440	1040
4....	365	437	274	199	156	101	66	1130	1430	1370	2060	934
5....	305	386	274	178	48	113	66	1400	1220	1380	2360	717
6....	274	372	351	172	100	127	89	1700	1130	1310	1080	605
7....	287	386	324	183	122	131	62	2000	864	1270	5060	527
8....	268	422	318	210	152	113	48	2020	746	1260	2850	462
9....	268	379	311	239	143	109	26	1600	1060	775	2160	404
10....	262	379	299	233	222	106	59	894	1580	707	1670	333
11....	239	400	287	183	227	99	66	698	2020	765	1390	333
12....	239	400	274	210	287	99	57	1020	2150	765	1210	326
13....	239	400	293	172	305	80	78	1010	1600	1230	1070	349
14....	280	422	256	143	239	75	89	1370	1510	1100	1120	318
15....	222	393	233	143	222	66	120	1650	1600	1020	1010	238
16....	216	324	216	152	135	62	127	2060	1460	1050	966	226
17....	167	311	256	172	148	44	252	2630	1700	1040	854	209
18....	152	365	256	167	167	39	380	2680	1750	1020	998	180
19....	152	365	280	150	178	44	596	2520	2060	1030	1410	209
20....	156	358	227	222	268	69	605	2520	2150	1860	2110	203
21....	156	299	239	227	268	37	785	2390	2080	1310	2000	197
22....	210	330	222	239	268	13	678	2270	1960	1220	1710	127
23....	251	330	215	216	293	20	678	2210	2540	1120	1710	117
24....	287	311	227	210	233	53	765	4430	2390	688	1440	120
25....	311	330	178	183	188	51	795	2030	2280	578	1270	151
26....	287	415	178	161	152	40	834	1810	2200	605	1050	215
27....	337	430	178	152	131	39	934	1910	2300	1530	1020	413
28....	365	337	156	143	127	21	811	1880	2340	1370	1540	544
29....	330	280	143	199	111	11	874	1710	2200	854	1020	614
30....	280	344	183	194	....	17	874	1650	2050	2460	1330	596
31....	330	....	199	194	....	44	....	1860	....	1920	1200	....
Total	8428	10986	7771	5338	5394	2179	11078	53572	53670	27457	52228	12721
Mean	272	366	251	188	186	70.3	369	1800	1800	1210	1680	424
Max..	407	437	351	239	305	131	934	4430	2540	2460	5060	1120
Min..	152	280	143	143	48	11	26	698	746	578	854	117
Acre-ft.	16720	21790	15410	11580	10700	4320	21970	110500	107000	74290	103600	25230

Total run-off for water year 1935-36=523,100 acre-feet.

NOTE: Above tables of daily discharge do not include water diverted around station in North Side Water Works Intake. See correction table.

**Table to Correct Arkansas River Near Pueblo
For Divisions Around Station by Northside Water Works Intake
For Water Year October 1, 1934, to September 30, 1935**

Month	Runoff in Acre-feet	Diverted by Northside Water Works Intake	Corrected for Diversion Total Flow Acre-ft.
October	6,810	3,000	9,810
November	5,410	2,800	8,210
December	6,590	2,300	8,890
January	7,310	3,000	10,310
February	4,810	2,500	7,310
March	3,070	2,300	5,370
April	4,670	1,280	5,950
May	28,820	2,040	30,860
June	135,600	2,590	138,200
July	95,780	2,390	98,170
August	60,170	2,250	62,420
September	27,720	2,370	30,090
Total runoff for water year 1934-1935.....	386,800	28,820	415,600

For Water Year October, 1935, to September 30, 1936

October	16,720	*3,260	19,980
November	21,790	2,840	24,630
December	15,410	2,360	17,770
January	11,580	3,220	14,800
February	10,700	3,790	14,490
March	4,320	2,730	7,050
April	21,970	*1,960	23,930
May	110,500	*2,460	113,000
June	107,500	*2,980	110,500
July	74,290	*3,070	77,360
August	103,600	*3,070	106,700
September	25,230	*4,210	29,440
Total runoff for water year 1935-1936.....	523,100	35,950	559,600

* Estimated.

Discharge of Arkansas River Near Nepesta, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	87	158	....	....	202	32	158	1080	1660	1090	640	
2	32	170	....	....	182	24	138	1180	1740	1020	1010	
3	26	149	....	....	152	32	128	1160	1500	1160	828	
4	14	135	....	....	130	35	146	1220	1490	806	850	
5	20	143	....	....	149	25	186	1160	1550	862	1330	
6	1	49	....	....	149	21	178	1170	1540	898	438	
7	4	112	....	....	140	20	164	1080	1380	762	430	
8	21	92	....	....	143	1	178	1650	1250	610	1700	
9	43	105	....	....	164	3	170	1380	1190	521	680	
10	90	134	....	....	161	6	152	1630	1290	630	946	
11	91	82	....	....	138	6	130	1780	1460	600	886	
12	87	89	....	....	138	16	90	2860	1540	610	560	
13	83	108	....	....	149	76	56	2020	1550	620	359	
14	88	108	....	....	149	69	71	2020	1390	366	284	
15	91	119	....	....	143	31	95	2290	1650	531	260	
16	98	105	....	....	140	37	133	2780	1680	430	236	
17	111	105	....	....	146	27	336	4450	1460	366	310	
18	100	105	....	....	138	81	2280	2480	1380	680	226	
19	95	158	....	....	143	182	6250	1910	1300	590	206	
20	84	164	....	....	146	186	1440	1980	1280	345	226	
21	83	143	....	....	128	140	850	2110	1250	620	211	
22	85	103	....	....	111	121	955	2290	5000	216	206	
23	128	118	....	....	105	138	940	2380	3300	254	211	
24	174	135	....	....	91	164	1190	2380	1100	278	177	
25	198	133	....	....	73	215	1230	1880	1280	620	126	
26	170	135	....	....	71	240	835	1890	1160	1360	201	
27	158	170	....	....	182	69	215	1070	2490	946	1170	284
28	161	165	....	....	202	67	215	1260	1630	773	1410	531
29	186	160	....	....	70	202	1210	2110	630	1030	406	
30	210	150	....	....	55	186	1480	1840	740	580	296	
31	198	....	....	....	45	....	7480	....	1080	970	....
Total	3017	3302	....	....	3887	2746	30979	58280	46539	22005	15054	
Mean.	97.3	127	....	....	125	91.5	999	1943	1501	710	502	
Max..	210	170	....	....	202	240	7480	4450	5000	1410	1700	
Min..	1	49	....	....	45	1	56	1080	630	216	126	
Acre-ft.	5980	7540	....	....	7710	5450	61450	115600	92310	43650	29860	

Total run-off for period = 369,550 acre-feet.

Discharge of Arkansas River Near Nepesta, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	272	338	296	181	184	152	40	965	1520	1450	831	736
2	366	284	276	173	185	156	103	880	1410	1090	2030	863
3	284	374	292	175	236	224	127	750	1050	983	2830	1070
4	272	502	323	200	225	204	114	707	1430	847	4990	1300
5	242	512	299	171	286	193	100	983	3890	736	6390	930
6	216	438	306	113	181	193	94	1200	965	636	12900	707
7	272	422	363	158	218	193	97	1700	722	557	14340	896
8	284	422	350	167	235	183	75	1900	557	1260	7600	608
9	272	274	340	177	284	165	70	1170	608	693	4560	518
10	278	331	338	177	258	188	58	679	1260	736	3020	407
11	284	374	322	195	357	188	46	328	1640	736	2020	344
12	260	398	310	194	365	178	21	722	4070	693	1340	397
13	248	352	307	195	417	160	20	983	1090	782	1220	376
14	231	324	328	160	400	147	56	1220	1070	847	1660	386
15	248	284	189	326	107	75	1640	1110	651	1610	344	
16	151	350	250	158	302	100	94	1920	1090	544	1260	304
17	168	401	231	215	188	92	114	2480	1480	608	1040	304
18	160	381	272	239	226	86	214	2050	1780	595	679	276
19	236	376	274	289	237	72	312	2200	1750	665	896	296
20	177	276	295	277	211	65	470	1450	2120	815	1640	328
21	196	371	285	314	270	83	651	1640	1980	1240	2280	344
22	236	371	307	335	173	80	651	1610	1590	679	1450	276
23	390	500	279	326	198	51	651	2120	1880	622	1240	236
24	345	473	256	202	154	49	750	5720	2150	595	1050	224
25	414	398	209	243	174	72	847	2250	2180	459	636	229
26	414	229	140	246	131	86	799	1220	2000	428	693	193
27	414	320	250	211	174	63	847	1750	2200	965	544	276
28	266	304	236	115	178	51	896	2180	2080	10090	948	531
29	382	283	172	107	178	35	930	1820	2020	1040	863	766
30	345	289	128	208	....	24	965	1320	1730	5570	815	570
31	338	158	258	228	....	22	....	1370	1820	983	....
Total	8661	11151	8490	6368	6951	3662	10287	48927	50422	39432	84358	15035
Mean.	279	372	274	205	240	118	343	1580	1680	1270	2720	501
Max..	414	512	363	335	417	224	965	5720	4070	10090	14340	1300
Min..	151	229	128	107	131	22	20	328	557	428	544	193
Acre-ft.	17180	22120	16840	12630	13790	7260	20400	97050	100000	78210	167300	29820

Total run-off for water year 1935-36=582,600 acre-feet.

Discharge of Arkansas River at La Junta, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	8	17	37	16	35	16	37	710	360	483	489
2	7	10	17	38	12	21	13	37	250	538	538	326
3	6	10	18	42	12	21	13	37	622	380	465	454
4	5	8	18	64	18	22	12	37	350	380	612	322
5	5	7	20	64	14	22	12	37	345	454	405	322
6	6	8	20	69	12	25	11	37	360	495	416	252
7	6	8	22	50	12	28	12	34	305	501	360	154
8	5	8	23	35	12	26	11	31	403	256	175	286
9	6	7	23	32	13	28	9	31	503	281	58	114
10	8	8	25	33	19	29	15	20	386	489	36	154
11	8	8	30	24	23	30	17	19	738	525	66	181
12	7	10	56	19	25	27	19	22	1490	477	94	240
13	7	9	40	17	28	28	23	26	1090	148	34	299
14	6	9	41	16	23	28	21	28	729	224	52	181
15	6	8	36	18	15	26	21	80	1220	260	87	92
16	6	9	28	16	16	30	23	26	986	507	18	117
17	6	8	14	37	19	26	26	414	1560	577	48	38
18	6	8	12	37	20	32	27	1080	1230	577	64	17
19	6	10	32	27	12	32	23	11530	887	590	85	54
20	6	8	32	27	12	25	39	458	868	590	68	46
21	7	8	14	27	16	24	26	106	605	704	112	24
22	7	10	23	28	16	22	26	145	680	4000	127	16
23	7	10	56	30	24	22	28	381	460	855	127	12
24	7	12	55	30	26	21	30	335	672	355	58	18
25	7	13	39	30	24	23	47	330	634	275	80	22
26	7	16	39	29	25	22	21	360	465	490	240	66
27	7	16	34	29	42	21	30	266	998	444	380	97
28	8	16	50	32	70	22	34	370	341	414	290	97
29	8	16	64	40	...	19	36	776	432	266	507	336
30	7	16	35	24	...	17	37	330	564	198	163	380
31	6	...	35	19	...	17	...	3300	...	198	516	...
Total	203	302	968	1020	576	771	683	20720	20883	16808	6764	5206
Mean.	6.55	10.1	31.2	32.9	20.6	24.9	22.8	668	696	542	218	174
Max..	8	16	64	69	70	35	47	11530	1560	4000	612	489
Min..	5	7	12	16	12	17	9	19	250	148	18	12
Acre-ft.	403	599	1920	2020	1140	1530	1350	41100	41420	33340	13420	10330

Total run-off for water year 1934-35=148,600 acre-feet.

Discharge of Arkansas River at La Junta, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	400	194	145	31	50	25	30	352	109	572	186	359
2	388	198	177	34	40	17	24	352	76	512	152	211
3	346	208	169	53	30	16	30	497	68	484	1330	195
4	312	226	157	45	20	19	27	262	68	512	1680	327
5	268	257	149	30	19	34	30	279	445	564	2740	475
6	226	257	194	27	14	27	30	475	141	498	3600	456
7	149	252	69	31	15	11	24	711	102	315	14220	477
8	134	221	120	124	20	10	22	5730	55	715	12280	515
9	128	216	131	77	20	8.2	25	1830	32	477	3250	320
10	124	190	117	56	30	7.5	22	175	37	275	1490	280
11	95	181	142	66	35	12	19	138	64	250	655	204
12	83	208	114	28	40	18	20	170	720	400	424	183
13	75	185	134	25	50	17	22	264	144	394	291	180
14	53	169	131	25	75	20	28	495	102	364	373	122
15	40	157	181	30	100	17	40	485	82	435	332	62
16	49	173	169	34	80	12	34	385	31	260	282	42
17	40	181	221	36	50	9.6	34	743	51	62	271	60
18	31	161	190	42	30	9.6	36	813	349	44	257	70
19	38	221	161	246	25	9.6	38	570	381	102	288	60
20	38	235	212	198	18	7.5	75	392	666	68	404	82
21	34	131	257	134	25	6.1	104	252	588	470	670	63
22	36	53	257	134	40	12	157	272	458	325	768	60
23	38	56	194	61	60	18	142	508	579	198	475	58
24	72	42	92	27	120	18	107	2330	564	139	346	42
25	107	69	53	45	58	17	177	1660	805	82	392	33
26	117	80	38	92	27	18	208	138	588	55	362	33
27	149	92	49	107	17	22	301	99	588	186	366	89
28	177	138	58	128	16	27	352	760	868	10250	349	178
29	208	157	42	64	13	27	346	345	680	2190	320	468
30	235	145	77	32	...	28	376	212	671	4260	400	503
31	203	...	45	66	...	28	...	218	910	373	...	...
Total	4393	5053	4245	2128	1137	528.1	2880	21912	10112	26368	49326	6212
Mean.	142	168	137	68.6	39.2	17.0	96.0	707	337	851	1590	207
Max..	400	257	257	246	120	34	376	5730	868	10250	14220	515
Min..	31	42	38	25	13	6.1	19	99	31	44	152	33
Acre-ft.	8710	10020	8420	4220	2260	1050	5710	43460	20060	52300	97840	12320

Total run-off for water year 1935-36=266,300 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of Arkansas River at Lamar, Colorado, for Year Ending Sept. 30, 1935.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	2	2	2	3	3	2	2	3	5370	109	18	3
2....	2	2	2	3	3	2	1	4	940	2	26	3
3....	2	2	2	3	4	2	2	4	710	1	42	3
4....	2	2	2	3	4	1	2	4	5	1	79	3
5....	2	2	2	3	4	1	2	2	5	1	121	3
6....	2	2	2	3	4	1	2	3	5	1	152	3
7....	2	2	2	3	4	1	2	3	3	1	212	2
8....	2	2	2	3	4	1	2	3	3	11	236	990
9....	2	2	2	3	4	1	2	3	3	1	232	1160
10....	2	2	2	3	2	1	2	2	3	1	201	250
11....	2	2	2	3	2	1	2	3	2	2	226	85
12....	2	2	2	3	2	1	1	2	4	880	201	25
13....	2	2	3	3	2	1	1	2	390	310	180	3
14....	2	2	3	2	2	1	1	2	310	10	3	3
15....	2	2	3	2	2	1	1	2	5	5	10	3
16....	2	2	2	2	2	1	1	2	4	3	10	3
17....	2	2	2	2	2	1	1	2	14	3	15	3
18....	2	2	2	2	2	1	1	7	3720	2	370	2
19....	2	2	2	2	2	1	1	4310	1910	1	232	2
20....	2	2	2	2	2	1	1	6890	124	1	5	2
21....	2	2	2	2	2	1	2	385	310	2	3	2
22....	2	2	2	2	2	1	2	28	70	1710	2	2
23....	2	2	2	2	2	1	2	3	29	3520	2	2
24....	2	2	2	2	17	1	2	2	6	1650	10	2
25....	2	2	2	2	15	2	1	2	1	6	375	30
26....	2	2	2	2	17	3	1	2	8	79	26	940
27....	2	2	2	2	18	9	1	3	1	435	23	20
28....	2	2	2	2	2	3	1	1	1320	16	20	3
29....	2	2	2	2	3	...	1	3	20	278	13	3
30....	2	2	2	3	...	1	3	1100	8	14	198	3
31....	2	...	2	3	...	1	...	565	...	12	5	3
Total	62	60	65	137	81	34	54	13360	16000	8760	2886	3753
Mean.	2.00	2.00	2.10	4.42	2.89	1.10	1.80	431	533	283	93.1	125
Max..	2	2	3	18	9	2	3	6890	5370	3520	370	1160
Min..	2	2	2	2	2	1	1	1	2	1	2	2
Acre-ft.	123	119	129	272	161	67	107	26500	31740	17380	5720	7440

Total run-off for water year 1934-35=89,760 acre-feet.

Discharge of Arkansas River at Lamar, Colorado, for Year Ending Sept. 30, 1936.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	4.8	2.6	2.6	16	3.8	14	1.2	9.6	454	5.8	1370	31
2....	5.1	2.6	2.6	15	3.4	12	1.2	14	406	7.8	481	25
3....	2.8	2.8	2.6	15	5.1	19	3.8	15	356	8.3	240	23
4....	3.1	2.8	2.6	14	5.1	24	3.8	17	318	10	1540	22
5....	3.4	2.8	2.6	14	6.5	22	1.8	13	296	24	2960	23
6....	3.8	2.8	2.6	8.3	6.5	21	2.3	19	442	20	3220	21
7....	3.8	2.8	2.6	7.8	5.8	21	2.6	18	210	21	10150	16
8....	3.8	2.8	2.6	9.6	15	9.2	2.6	97	81	15	14420	11
9....	3.8	2.8	2.6	12	16	8.8	2.8	11360	92	24	6600	20
10....	3.1	2.8	2.6	29	15	1.5	3.1	556	52	12	2530	12
11....	3.1	2.8	2.6	131	25	1.2	3.8	205	44	12	1420	9.2
12....	3.1	2.8	2.3	81	40	0.9	3.8	46	145	7.4	666	5.1
13....	3.1	2.8	2.3	81	56	0.7	5.5	33	474	17	350	4.1
14....	3.1	2.8	2.3	131	60	0.4	3.4	5	110	16	150	4.8
15....	3.1	2.8	2.3	145	60	0.4	3.4	5	45	4.5	50	3.4
16....	3.1	2.8	2.3	64	50	2.6	3.8	4	9.2	4.1	43	4.5
17....	2.6	2.8	2.3	12	60	2.8	3.1	4	9.2	3.8	30	5.1
18....	2.6	2.8	2.2	11	50	5.1	3.1	4	12	14	21	4.8
19....	2.6	2.8	18	44	50	5.1	4.1	54	12	5.1	28	4.5
20....	2.3	2.8	19	23	50	5.1	4.1	454	9.2	8.3	19	4.8
21....	2.3	2.8	20	23	50	4.1	4.1	142	12	14	20	4.8
22....	2.3	2.8	20	33	50	4.1	7.0	280	7.0	19	36	4.8
23....	2.3	2.8	22	23	75	4.1	11	89	7.0	5.1	26	3.8
24....	2.3	2.6	46	16	150	1.8	12	3070	7.0	12	22	4.1
25....	2.3	2.6	40	11	200	1.8	22	6280	9.6	14	24	5.1
26....	2.3	2.6	28	11	57	1.8	17	658	12	20	22	4.8
27....	2.6	2.6	26	138	47	1.5	20	830	7.4	14	14	5.5
28....	2.6	2.8	26	138	47	1.5	12	900	7.4	124	15	8.8
29....	2.6	2.8	22	16	22	1.5	15	1330	12	9380	20	7.8
30....	2.6	2.8	17	11	...	1.8	12	11180	7.0	14140	17	7.0
31....	2.6	...	16	3.8	...	2.0	...	960	...	3460	23	...
Total	93.0	82.8	384.4	1287.5	1281.2	202.8	195.4	38651.6	3665.0	27442.2	46527	310.8
Mean.	3.00	2.76	12.4	41.5	44.2	6.54	6.51	1250	122	885	1500	10.4
Max..	5.1	2.8	46	145	200	24	22	11360	474	14140	14420	31
Min..	2.3	2.6	2.3	3.8	3.4	0.4	1.2	4	7	3.8	14	3.4
Acre-ft.	184	164	762	2550	2540	402	388	76660	7270	54430	92280	616

Total run-off for water year 1935-36=238,245 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Arkansas River at Holly, Colorado, for Year Ending Sept. 30, 1935.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	12	4	2	20	21	10	7	4	6410	178	123	336
2....	7	4	2	24	20	10	6	5	3310	191	107	173
3....	7	4	3	30	18	10	6	4	1540	184	97	107
4....	7	4	3	28	15	10	6	4	1130	145	73	311
5....	7	4	2	30	14	10	5	4	750	92	59	69
6....	5	4	4	32	11	10	5	4	488	52	56	56
7....	5	4	4	32	10	9	5	4	336	28	52	45
8....	5	4	4	30	9	10	4	4	247	1240	42	45
9....	5	4	4	30	9	10	4	4	198	287	30	1380
10....	5	4	4	30	9	10	4	4	156	139	20	1200
11....	5	4	5	30	9	10	4	4	97	123	10	471
12....	4	4	7	28	8	9	4	3	56	4080	5	287
13....	4	4	7	26	8	9	4	5	97	1680	5	198
14....	4	4	7	26	9	9	3	5	710	488	2	112
15....	4	4	7	24	9	7	3	5	145	102	2	76
16....	4	4	8	24	9	7	4	5	42	59	2	49
17....	4	4	8	22	9	7	4	5	92	32	2	30
18....	4	4	8	22	9	7	4	6	66	34	2	20
19....	4	4	8	22	9	7	4	804	1240	36	2	11
20....	4	4	8	24	10	7	4	5360	370	32	2	6
21....	4	4	9	24	12	7	3	2190	156	28	1	4
22....	4	4	9	28	11	7	3	824	134	357	1	2
23....	4	3	10	28	11	7	3	437	162	5850	1	2
24....	4	3	10	40	8	7	3	295	270	3680	1	2
25....	4	3	11	49	6	7	4	247	123	1940	2	2
26....	4	3	11	28	6	7	4	254	191	868	2	150
27....	4	3	12	26	12	7	4	4130	198	403	4	1320
28....	4	2	14	24	13	7	3	1980	2680	233	6000	608
29....	4	2	14	22	7	7	4	279	1200	184	1680	247
30....	4	2	15	22	7	7	4	247	626	162	1940	156
31....	4	..	15	21	..	7	..	1220	..	139	680	..
Total	150	109	235	846	304	255	125	18346	23220	23046	11005	7475
Mean.	4.85	3.63	7.58	27.3	10.9	8.23	4.17	592	774	743	355	249
Max..	12	4	15	49	21	10	7	5360	6410	5850	6000	1380
Min..	4	2	2	20	6	7	3	3	42	28	1	2
Acre-ft.	298	216	466	1680	603	506	248	36390	46060	45710	21830	14830

Total run-off for water year 1934-35=168,800 acre-feet.

Discharge of Arkansas River at Holly, Colorado, for Year Ending Sept. 30, 1936.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	118	17	58	71	40	109	22	16	1510	31	3960	17
2....	97	19	58	60	35	94	24	16	992	24	1890	16
3....	78	20	58	69	30	91	20	16	2080	19	1050	15
4....	64	19	58	52	25	86	21	16	1310	17	968	15
5....	46	19	60	60	25	71	23	16	1050	17	1630	15
6....	40	20	64	37	25	71	20	16	680	17	2680	14
7....	37	22	67	20	30	58	22	17	838	18	4880	15
8....	32	23	69	27	25	44	22	17	690	17	13300	14
9....	30	24	69	36	20	40	25	6400	569	16	12640	15
10....	31	25	73	44	30	37	21	4770	536	16	5950	15
11....	28	26	73	56	60	32	19	1180	378	16	3300	15
12....	28	27	73	78	90	30	19	623	301	16	1690	14
13....	27	29	75	97	95	34	17	448	827	16	872	14
14....	25	30	73	105	118	37	17	289	794	135	552	14
15....	22	31	71	156	196	40	16	209	456	88	265	15
16....	20	34	71	152	170	39	16	149	313	46	122	16
17....	19	35	69	149	223	38	16	112	234	26	78	17
18....	19	36	69	29	132	36	15	62	183	17	52	19
19....	17	37	64	38	115	27	15	38	135	16	37	20
20....	17	38	64	51	97	24	14	35	112	14	29	21
21....	17	39	64	75	86	25	15	91	80	14	27	22
22....	16	42	64	115	138	24	16	109	67	13	27	24
23....	16	44	75	196	204	24	15	295	56	13	26	25
24....	15	45	97	209	340	26	17	896	48	12	25	27
25....	15	46	73	138	362	28	17	4810	42	12	24	28
26....	16	50	64	58	255	29	17	3920	38	11	23	30
27....	16	51	62	48	170	25	16	1330	37	12	22	32
28....	16	54	86	45	196	23	16	884	32	12	22	35
29....	16	58	67	45	152	20	17	2240	30	4190	22	36
30....	15	58	60	40	..	20	17	17480	39	12150	22	35
31....	16	..	67	40	..	19	..	8850	..	10560	23	..
Total	969	1018	2115	2396	3484	1301	547	55350	14457	27581	56208	610
Mean.	31.3	33.9	68.2	77.3	120	42.0	18.2	1790	482	890	1810	20.3
Max..	118	58	97	209	362	109	25	17480	2080	12150	13300	36
Min..	15	17	58	20	20	19	14	16	30	11	22	14
Acre-ft.	1920	2020	4200	4750	6910	2580	1080	109800	28680	54710	111500	1210

Total run-off for water year 1935-36=329,360 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of South Arkansas River Near Salida, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	2	7	50	42	41	41	4	3	93	40	11	26
2....	2	7	55	39	43	42	3	3	94	35	18	22
3....	2	8	59	49	38	40	3	3	165	32	8	20
4....	2	13	60	47	43	40	2	2	232	32	6	22
5....	2	12	62	49	42	38	2	12	269	27	6	22
6....	1	10	64	50	45	38	3	12	339	20	6	20
7....	2	9	62	45	44	44	3	7	395	12	6	25
8....	2	9	57	45	45	43	3	6	433	8	4	33
9....	2	8	48	48	44	35	2	5	486	6	4	32
10....	3	7	52	47	40	29	1	3	535	3	5	29
11....	2	7	54	45	38	33	1	2	591	3	6	25
12....	4	6	54	47	40	31	1	1	541	3	9	23
13....	7	6	53	43	40	30	1	1	561	11	3	21
14....	10	6	54	42	40	24	0	2	617	15	2	20
15....	8	4	57	44	42	21	0	3	518	26	3	18
16....	8	3	54	42	50	18	1	3	451	23	3	13
17....	7	4	48	41	52	14	1	2	300	22	1	10
18....	6	7	52	39	40	10	4	45	230	22	1	9
19....	6	7	45	55	39	8	3	37	237	24	1	8
20....	7	6	43	45	37	6	5	34	248	19	1	3
21....	6	6	47	42	29	4	3	29	237	17	2	2
22....	6	6	48	42	26	4	4	31	202	22	2	3
23....	6	10	47	42	26	3	4	54	177	23	1	1
24....	6	19	45	42	26	4	4	76	132	15	2	1
25....	6	24	45	41	35	4	4	52	104	12	14	5
26....	5	26	43	41	45	3	7	72	78	5	4	30
27....	5	34	44	41	50	5	8	68	70	2	4	51
28....	5	37	45	40	42	4	8	55	60	2	6	48
29....	5	40	46	40	40	4	7	59	52	2	5	51
30....	6	45	43	42	5	5	5	100	45	11	12	48
31....	7	41	43	5	5	5	103	15	13	..	..	..
Total	148	393	1577	1360	1122	630	98	890	8492	519	169	642
Mean.	4.77	13.1	50.9	43.9	40.1	20.3	3.27	28.7	283	16.7	5.45	21.4
Max..	10	45	64	39	52	44	8	103	617	40	18	51
Min...	1	3	41	55	26	3	0	1	45	2	1	1
Acre-ft.	294	780	3130	2700	2230	1250	194	1770	16840	1030	335	1270

Total run-off for water year 1934-35=31,820 acre-feet.

Discharge of South Arkansas River Near Salida, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	39	52	64	69	50	42	4.0	38	265	12	127	46
2....	52	57	56	60	50	39	14	48	216	10	100	48
3....	46	45	57	55	48	42	12	69	167	7.2	106	78
4....	39	42	57	58	45	44	9.4	113	133	4.5	107	73
5....	34	39	65	54	45	42	7.2	141	117	4.2	200	64
6....	34	56	62	52	45	39	5.6	209	96	1.7	329	58
7....	26	51	65	50	62	36	3.2	183	94	0.5	292	51
8....	24	48	67	50	69	32	2.6	160	104	0.5	255	44
9....	23	50	67	52	67	28	2.3	141	96	0.5	214	34
10....	20	45	67	54	54	25	2.9	109	104	1.6	180	30
11....	19	40	62	60	44	29	7.2	111	115	8.4	167	28
12....	19	42	62	73	45	24	11	137	100	11	156	29
13....	16	46	60	73	40	20	6.1	169	100	4.0	143	26
14....	16	44	54	67	38	16	6.7	188	96	3.7	133	23
15....	16	39	46	60	42	16	4.0	228	82	6.7	125	23
16....	13	45	52	52	42	15	5.6	298	76	1.1	115	20
17....	14	44	45	44	42	15	14	336	67	0.5	102	20
18....	16	42	45	40	50	8.4	15	339	56	1.0	87	20
19....	22	42	45	42	58	5.6	9.4	321	45	6.2	82	19
20....	20	44	45	50	60	4.0	12	318	30	6.7	109	15
21....	19	42	50	54	60	3.4	14	318	28	2.9	107	12
22....	20	36	50	56	60	2.1	16	285	24	1.8	96	9.1
23....	36	40	50	54	62	1.8	25	275	20	1.1	85	8.4
24....	64	39	45	52	46	2.6	15	265	26	0.9	78	5.6
25....	71	48	40	48	42	2.1	22	275	18	1.2	65	4.2
26....	82	52	45	46	45	5.6	24	292	17	2.1	58	5.6
27....	85	45	50	44	46	11	24	262	23	6.7	46	12
28....	65	50	51	46	45	5.6	24	258	24	2.4	33	32
29....	58	51	56	46	45	4.5	20	255	22	2.8	38	46
30....	56	60	54	60	4.0	4.2	26	275	12	5.1	46	69
31....	51	64	60	60	4.0	4.0	295	127	45	..	..	..
Total	1115	1376	1698	1681	1447	568.9	364.2	6711	2373	338.7	3826	953.2
Mean.	36.0	45.9	54.8	54.2	49.9	18.4	12.1	216	79.1	10.9	123	31.8
Max...	85	60	67	73	69	44	26	339	265	127	329	78
Min...	13	36	40	40	38	1.8	2.3	38	12	0.5	33	4.2
Acre-ft.	2210	2730	3370	3330	2870	1130	722	13310	4710	672	7590	1890

Total run-off for water year 1935-36=44,534 acre-feet.

Discharge of Grape Creek Near Westcliffe, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	4	6	.	.	.	.	8	8	7	52	30	77
2.	4	6	.	.	.	.	7	7	10	37	25	127
3.	5	6	.	.	.	.	7	11	13	44	21	90
4.	4	6	.	.	.	.	6	25	18	39	18	61
5.	3	6	.	.	.	.	6	50	25	32	17	48
6.	3	6	.	.	.	.	6	24	37	25	15	39
7.	4	7	.	.	.	.	6	12	45	23	14	32
8.	3	7	.	.	.	.	6	11	47	30	12	34
9.	3	6	.	.	.	.	8	10	74	58	25	35
10.	3	6	.	.	.	.	8	8	120	61	26	38
11.	3	6	.	.	.	.	7	7	175	54	21	28
12.	3	5	.	.	.	.	6	7	252	64	18	21
13.	9	6	.	.	.	.	6	10	280	115	17	18
14.	4	.	.	.	.	.	4	30	291	122	16	16
15.	3	.	.	.	.	.	4	75	303	159	16	13
16.	4	.	.	.	.	.	3	22	306	122	16	10
17.	6	.	.	.	.	.	4	46	288	86	12	9
18.	6	.	.	.	.	.	16	149	228	84	9	8
19.	5	.	.	.	.	.	24	86	186	81	7	8
20.	5	.	.	.	.	.	13	38	169	78	6	6
21.	5	.	.	.	12	11	31	169	76	6	13	
22.	4	.	.	.	10	7	21	179	74	6	20	
23.	4	.	.	.	10	7	14	165	72	9	13	
24.	6	.	.	.	12	9	13	153	70	9	10	
25.	5	.	.	.	10	21	11	127	66	10	10	
26.	6	.	.	.	11	44	10	109	59	77	17	
27.	5	.	.	.	11	41	8	101	51	37	29	
28.	5	.	.	.	8	21	10	84	40	44	39	
29.	6	.	.	.	8	13	10	82	35	63	48	
30.	6	.	.	.	8	10	8	68	40	68	32	
31.	6	.	.	.	9	.	8	.	36	74	.	.
Total	143	79	.	.	109	339	780	4117	1985	744	949	
Mean.	4.61	Nov.	.	.	Mar.	11.3	25.2	137	64.0	24.0	31.6	
Max..	9	1 to	.	.	21 to	44	149	309	159	77	127	
Min..	3	13	.	.	31	3	7	7	23	6	6	
Acre-ft.	284	157	.	.	216	672	1550	8170	3940	1480	1880	

Total run-off for period=18,349 acre-feet.

Discharge of Grape Creek Near Westcliffe, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	24	13	.	.	.	15	18	6.6	12	20	40	66
2.	21	13	.	.	.	15	21	6.6	8.0	16	57	65
3.	19	13	.	.	.	16	20	7.1	7.6	12	106	65
4.	18	12	.	.	.	16	18	6.6	7.6	8.0	182	65
5.	16	12	.	.	.	17	19	4.8	6.2	6.6	203	65
6.	16	12	.	.	.	18	19	4.0	3.5	4.8	534	56
7.	15	11	.	.	.	18	18	4.0	3.5	4.8	642	47
8.	19	11	.	.	.	18	19	9.2	3.2	4.8	369	41
9.	17	11	.	.	.	18	19	37	3.2	4.4	197	35
10.	14	11	.	.	.	18	18	107	4.4	5.8	131	32
11.	12	11	.	.	.	19	16	146	7.1	5.8	100	33
12.	11	11	.	.	.	19	15	86	7.1	5.8	80	35
13.	10	11	.	.	.	19	15	35	6.2	8.6	64	30
14.	9.8	11	.	.	.	19	15	26	4.0	8.6	66	22
15.	8.6	11	.	.	.	19	15	19	2.8	5.8	47	19
16.	8.6	11	.	.	.	20	16	14	2.0	8.0	47	17
17.	8.6	11	.	.	.	19	15	15	1.0	7.1	41	16
18.	10	11	.	.	.	20	15	16	0.5	2.2	33	15
19.	12	11	.	.	.	20	15	15	0.1	2.2	35	16
20.	12	11	.	.	.	19	15	12	0.1	2.2	81	17
21.	13	11	.	.	.	20	28	10	0.1	2.2	155	15
22.	13	10	.	.	.	21	26	8.6	0.1	5.3	123	14
23.	17	10	.	.	.	21	20	9.2	6.6	4.4	86	13
24.	19	10	.	.	.	19	18	35	197	3.5	62	12
25.	19	10	.	.	.	21	16	31	38	3.5	50	11
26.	21	10	.	.	.	20	16	25	24	3.5	51	30
27.	24	10	.	.	.	20	16	19	41	4.4	46	100
28.	29	10	.	.	.	22	13	18	35	29	36	150
29.	26	10	.	.	.	20	12	17	25	55	52	42
30.	19	10	.	.	.	18	7.6	15	20	56	74	59
31.	15	.	.	.	.	19	18	43	43	68	.	.
Total	497.6	330	.	.	583	513.6	782.7	476.9	353.3	3858	1203	
Mean.	16.1	11.0	.	.	18.8	17.1	25.2	15.9	11.4	124	40.1	
Max..	29	13	.	.	22	28	146	197	56	642	150	
Min..	8.6	10	.	.	15	7.6	4.0	0.1	2.2	33	12	
Acre-ft.	987	655	.	.	1160	1020	1550	946	701	7650	2390	

Total run-off for period=17,059 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

**Discharge of Huerfano River at Manzanares Crossing Near Redwing, Colorado, for
Year Ending Sept. 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	9	....	....	....	10	11	16	92	76	141	41
2	23	9	....	....	....	10	10	16	95	78	80	38
3	22	9	....	....	....	10	10	15	103	78	68	39
4	20	9	....	....	....	10	11	17	115	84	56	36
5	16	9	....	....	....	10	12	19	126	68	70	32
6	18	8	....	....	....	11	11	24	124	65	84	31
7	17	8	....	....	....	23	11	27	128	72	76	34
8	15	8	....	....	....	14	11	27	147	80	106	34
9	16	8	....	....	....	14	11	27	167	76	108	35
10	18	8	....	....	....	14	12	27	170	72	89	34
11	16	7	....	....	....	14	11	29	161	65	74	34
12	15	7	....	....	....	14	10	29	154	59	65	31
13	16	7	....	....	....	14	11	31	170	66	56	29
14	15	7	....	....	....	14	11	35	234	66	52	29
15	15	7	....	....	....	14	13	38	222	63	50	26
16	15	8	....	....	....	13	15	41	185	52	40	26
17	15	8	....	....	....	13	15	47	146	56	40	26
18	13	9	....	....	....	13	12	61	138	65	35	26
19	12	9	....	....	....	13	19	54	141	54	31	24
20	14	10	....	....	....	13	20	47	131	51	35	24
21	14	11	....	....	....	12	17	46	136	84	35	25
22	12	15	....	....	....	12	17	48	141	115	32	24
23	14	15	....	....	....	12	20	50	129	119	31	21
24	15	15	....	....	....	12	20	55	119	106	33	23
25	12	15	....	....	....	12	20	63	112	93	36	26
26	11	18	....	....	....	12	18	66	101	91	39	27
27	10	19	....	....	....	12	18	72	97	84	42	32
28	9	18	....	....	....	12	14	76	95	130	50	35
29	9	17	....	....	....	12	14	84	93	65	46	34
30	9	17	....	....	....	12	15	90	80	57	46	29
31	9	....	....	....	....	11	....	97	....	78	42	....
Total	458	324	....	....	....	392	420	1374	4052	2368	1788	905
Mean.	14.8	10.8	....	....	....	12.6	14.0	44.3	135	76.4	57.7	30.2
Max..	23	19	....	....	....	23	20	97	234	130	141	41
Min..	9	7	....	....	....	10	10	15	80	51	31	21
Acre-ft.	908	643	....	....	....	778	833	2730	8040	4700	3550	1800

Total run-off for period=23,982 acre-feet.

**Discharge of Huerfano River at Manzanares Crossing Near Redwing, Colorado,
for Year Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	....	....	....	....	10	8.8	42	67	46	82	98
2	30	....	....	....	....	10	11	41	64	44	104	73
3	27	....	*18	*10	....	10	12	48	56	40	94	70
4	27	....	....	....	....	10	10	58	52	36	83	64
5	27	....	....	....	....	10	10	65	47	33	264	61
6	25	....	....	....	....	11	14	65	51	28	190	52
7	22	....	....	....	....	11	9.6	58	49	29	157	46
8	24	....	....	....	....	12	14	48	52	32	126	42
9	25	....	....	....	....	12	13	47	56	29	100	40
10	23	....	....	....	....	10	9.6	43	62	34	91	35
11	21	....	....	....	....	13	15	40	58	33	89	35
12	23	....	....	....	....	15	19	43	54	35	80	35
13	23	....	....	....	....	10	21	46	54	28	65	32
14	20	....	....	....	....	10	25	51	49	25	62	30
15	21	....	....	....	....	10	25	62	54	27	62	30
16	22	....	....	....	....	10	26	74	62	25	58	31
17	21	....	....	....	....	10	29	77	56	24	52	30
18	21	....	....	....	....	11	32	72	52	22	54	33
19	22	....	....	....	....	7.3	33	72	49	23	67	32
20	22	....	....	....	....	9.6	36	72	49	23	73	28
21	20	....	....	....	....	11	37	70	47	24	115	24
22	20	....	....	....	....	11	41	65	51	23	92	23
23	20	....	....	....	....	6.6	38	67	110	22	75	25
24	20	....	....	....	....	9.6	40	69	72	21	65	23
25	20	....	....	....	....	11	41	72	67	20	59	22
26	20	....	....	....	....	14	40	67	67	18	55	27
27	20	....	....	....	....	15	40	70	69	44	51	30
28	20	....	....	....	....	12	40	72	65	312	51	28
29	20	....	....	....	....	10	43	74	65	157	56	29
30	20	....	....	....	....	8.8	40	87	54	122	72	32
31	20	....	....	....	....	10	....	77	92	106	1160	1160
Total	696	....	....	....	....	330.9	773	1914	1760	1471	2750	1160
Mean.	22.5	....	....	....	....	10.7	25.8	61.7	58.7	47.5	88.7	38.7
Max..	30	....	....	....	....	15	43	87	110	312	264	98
Min..	20	....	....	....	....	6.6	8.8	40	47	18	51	22
Acre-ft.	1380	....	....	....	....	656	1530	3800	3490	2920	5460	2300

Total run-off for period=21,536 acre-feet.

*Discharge measurement.

**Discharge of Cucharas River at Boyd Ranch Near La Veta, Colorado,
for Year Ending Sept. 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	5	5	2	4	6	4	5	13	112	41	25	17
2....	5	5	2	7	6	5	6	12	102	36	26	18
3....	5	4	2	8	6	4	6	12	96	36	26	19
4....	5	5	2	6	6	5	6	12	94	35	24	18
5....	5	5	2	6	6	5	6	12	96	34	21	15
6....	5	5	2	5	6	6	6	13	98	35	20	14
7....	5	5	2	5	6	6	6	14	96	32	24	15
8....	5	5	2	5	5	5	5	17	96	29	24	16
9....	5	5	2	5	6	6	5	19	94	28	24	17
10....	5	5	2	5	6	8	5	19	98	28	25	14
11....	5	5	2	5	6	7	5	5	94	29	24	14
12....	5	5	3	5	7	5	5	24	92	40	26	13
13....	5	5	5	7	7	5	5	24	88	44	24	12
14....	5	5	5	7	6	6	5	24	100	49	21	12
15....	5	5	5	6	6	6	6	25	102	41	21	12
16....	5	5	5	6	6	7	6	26	102	33	19	11
17....	5	5	5	6	6	6	6	46	94	33	19	11
18....	5	5	6	4	2	5	6	66	83	45	19	11
19....	5	5	6	4	2	5	6	9	60	40	17	11
20....	5	4	4	2	6	6	11	50	74	37	19	10
21....	5	3	4	2	5	6	12	48	86	35	21	11
22....	5	2	6	2	5	6	13	66	90	33	18	10
23....	5	2	6	3	6	5	12	110	80	32	20	9
24....	5	2	5	3	5	6	13	158	72	31	21	10
25....	5	2	5	5	2	5	12	170	68	29	19	13
26....	5	2	6	5	2	5	12	152	64	28	18	16
27....	5	2	5	6	2	6	12	148	59	26	18	17
28....	5	2	5	5	2	5	12	134	55	26	19	19
29....	5	2	5	3	...	6	11	119	52	24	19	18
30....	5	2	5	5	...	6	12	114	50	26	18	15
31....	5	4	6	...	6	...	114	...	26	18	...	...
Total	155	119	120	141	149	176	241	1842	2567	1041	657	418
Mean	5.00	3.97	3.87	4.55	5.32	5.63	8.03	59.4	85.6	33.6	21.2	13.9
Max..	5	5	6	8	7	8	13	170	112	49	26	19
Min..	5	2	2	2	2	4	5	12	50	24	17	9
Acre-ft.	307	236	238	280	296	349	478	3650	5090	2060	1300	829

Total run-off for water year 1934-35=15,110 acre-feet.

**Discharge of Cucharas River at Boyd Ranch Near La Veta, Colorado, for Year Ending
Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	14	9.8	7.8	...	...	7	8.6	17	52	23	18	14
2....	14	10	8.0	...	...	7	9.5	17	46	22	19	15
3....	12	9.8	8.0	*10	...	7	7.3	17	43	23	20	14
4....	12	8.9	9.2	...	...	7	6.2	16	40	22	28	14
5....	13	9.5	7.1	...	...	7.5	6.2	16	37	21	47	14
6....	12	9.8	7.1	...	...	7.8	6.7	16	37	19	37	14
7....	11	9.5	8.9	...	...	8.0	6.0	17	37	18	34	12
8....	12	9.2	9.2	...	...	7.8	6.0	27	37	18	30	12
9....	12	9.5	8.9	...	...	7.6	6.0	50	37	18	26	12
10....	12	9.2	8.0	...	...	7.6	5.4	24	44	18	24	12
11....	10	8.3	8.3	...	...	8.0	8.3	20	53	18	23	13
12....	10	8.3	9.2	...	...	8.0	8.0	24	43	18	22	14
13....	10	8.6	9.2	...	...	7.6	9.2	35	35	14	21	11
14....	10	8.3	11	...	...	7.3	9.2	60	29	14	19	9.5
15....	10	8.3	8.9	...	...	7.1	10	138	29	14	18	9.8
16....	10	8.9	9.2	...	...	7.1	9.8	243	28	12	16	10
17....	10	7.8	8.6	...	...	6.9	9.2	253	27	13	14	10
18....	11	7.8	8.6	...	...	7.3	9.5	214	26	12	14	10
19....	11	8.6	8.6	...	...	7.3	10	168	26	12	16	11
20....	11	9.2	8.6	...	...	7.1	11	153	26	11	15	10
21....	10	8.3	8.6	...	...	7.3	14	138	25	11	16	9.5
22....	11	8.3	8.6	...	...	7.1	14	122	25	12	16	9.8
23....	11	8.3	8.6	...	...	7.1	15	108	26	12	15	10
24....	12	8.6	8.6	...	...	7.8	17	104	28	10	14	9.5
25....	11	8.3	8.6	...	...	8.6	18	93	27	9.8	13	8.9
26....	12	8.3	9.0	...	...	10	19	86	26	9.8	13	10
27....	11	9.2	9.0	...	...	11	18	84	26	12	14	14
28....	11	9.2	9	...	...	8.6	17	76	25	16	19	16
29....	11	8.3	9	...	...	8.3	17	70	23	16	20	17
30....	11	8.3	9	...	...	7.8	17	68	23	18	19	17
31....	9.5	9	...	...	...	8.0	...	58	...	17	14	...
Total	347.5	264.4	269.4	...	...	239.6	328.1	2532	986	483.6	634	363.0
Mean	11.2	8.81	8.69	...	...	7.73	10.9	81.7	32.9	15.6	20.5	12.1
Max..	14	10	11	...	...	11	19	253	53	23	47	17
Min..	9.5	7.8	7.1	...	...	6.9	5.4	16	23	9.8	13	8.9
Acre-ft.	689	524	534	...	...	475	651	5020	1960	959	1260	720

Total run-off for period=12,792 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

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Discharge of Purgatoire River at Trinidad, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	14	16	17	18	11	15	8	23	158	133	70	114
2....	13	17	26	25	10	15	10	31	154	123	98	98
3....	13	17	30	52	12	15	10	34	158	126	145	96
4....	14	16	50	59	12	13	6	37	162	126	107	98
5....	14	16	40	15	13	10	6	35	185	117	74	84
6....	13	16	44	24	15	12	7	39	238	107	88	68
7....	14	18	16	23	16	10	9	39	244	133	93	205
8....	15	17	36	20	17	10	7	39	250	162	141	210
9....	15	17	28	19	17	10	7	42	256	150	114	117
10....	18	17	37	16	13	12	7	46	355	126	104	68
11....	23	17	32	11	17	12	5	43	364	114	126	61
12....	23	17	35	15	13	13	7	50	332	268	141	55
13....	21	16	28	11	13	13	5	64	332	310	93	40
14....	20	16	23	9	14	10	4	88	508	487	84	40
15....	18	14	22	14	14	7	4	66	508	166	76	43
16....	16	13	24	11	15	7	4	81	518	117	84	39
17....	15	15	16	6	15	8	4	262	574	110	180	34
18....	16	15	20	7	16	7	15	518	382	123	93	30
19....	16	13	15	13	18	6	19	195	355	123	93	27
20....	15	12	30	9	16	7	18	123	332	114	72	27
21....	15	20	21	9	15	7	22	107	348	325	70	23
22....	15	17	19	10	13	10	19	88	409	180	145	27
23....	15	15	19	11	12	10	18	226	364	162	154	27
24....	15	17	13	20	10	12	26	302	325	114	88	27
25....	15	17	14	23	7	12	27	256	250	101	81	34
26....	15	13	14	17	10	10	27	220	373	101	72	42
27....	16	15	15	10	13	8	22	200	256	93	88	48
28....	16	9	19	15	16	9	21	226	205	88	98	64
29....	16	19	15	13	...	10	24	175	190	101	170	70
30....	16	30	15	12	...	10	26	162	154	70	550	55
31....	16	...	13	11	...	12	...	162	...	70	166	...
Total	496	487	746	528	383	322	394	3979	9239	4640	3758	1971
Mean.	16.0	16.2	24.1	17.0	13.7	10.4	13.1	128	308	150	121	65.7
Max..	23	30	50	59	18	15	27	518	574	487	550	210
Min..	13	9	13	6	7	6	4	23	154	70	70	23
Acre-ft.	984	966	1480	1050	760	639	781	7890	18330	9200	7450	3910

Total run-off for water year 1934-35=53,440 acre-feet.

Discharge of Purgatoire River at Trinidad, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	49	34	22	1.2	21	14	11	58	89	65	79	65
2....	48	34	28	13	24	16	11	52	80	53	170	61
3....	47	32	24	22	14	16	11	53	76	46	246	59
4....	48	32	27	26	21	15	10	58	77	37	208	58
5....	47	31	24	5.5	14	15	13	66	77	35	274	54
6....	45	33	21	9	11	16	17	60	69	30	542	46
7....	46	30	19	13	19	16	14	67	62	27	357	90
8....	45	30	16	19	22	16	10	112	52	36	241	55
9....	43	30	15	14	22	15	12	160	46	88	212	47
10....	43	30	20	10	31	14	13	112	60	36	167	41
11....	41	29	20	17	22	15	10	102	143	20	139	36
12....	37	28	14	11	17	14	8.5	91	112	15	113	40
13....	37	28	14	18	16	13	9.6	73	80	11	96	41
14....	37	30	11	15	11	13	14	76	64	11	113	28
15....	37	29	7	15	15	14	20	88	53	14	92	30
16....	35	27	15	12	44	13	22	125	52	21	78	32
17....	37	27	22	10	9.6	12	28	163	49	17	67	43
18....	40	26	16	9	15	13	31	151	45	13	59	68
19....	41	25	16	22	23	13	34	140	43	12	58	58
20....	42	23	13	20	24	12	42	120	40	21	64	50
21....	40	24	15	20	19	11	53	110	44	11	102	49
22....	40	24	16	31	17	11	43	97	64	17	78	58
23....	46	25	16	20	17	13	38	89	102	13	58	57
24....	44	24	15	20	14	12	39	110	102	8.5	50	41
25....	41	24	16	20	14	11	53	120	84	7.0	43	39
26....	41	28	23	19	11	9.6	64	100	65	9.6	41	40
27....	40	25	18	22	12	11	58	108	74	22	41	44
28....	40	20	5	20	14	12	48	120	78	458	68	59
29....	39	22	9	20	14	11	50	110	97	68	78	61
30....	37	25	8	30	...	9.6	55	127	74	204	81	65
31....	36	...	22	...	9	9.6	...	110	...	9.6	85	...
Total	1289	\$29	514	525.7	527.6	405.8	\$42.1	3128	2153	1522.1	4100	1515
Mean.	41.6	27.6	16.6	17.0	18.2	13.1	28.1	101	71.8	49.1	132	50.5
Max..	49	34	28	31	44	16	64	163	143	458	542	90
Min..	35	20	5	1.2	9.6	9.6	8.5	52	40	41	28	28
Acre-ft.	2560	1640	1020	1040	805	1670	6200	4270	3020	8130	3000	

Total run-off for water year 1935-36=34,405 acre-feet.

**Discharge of Purgatoire River at Nine Mile Dam Near Higbee, Colorado, for Year
Ending Sept. 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	7.9	1.0	1.0	10	14	6.9	0.5	1.0	68	32	21	254
2....	7.0	1.0	1.0	10	12	4.7	0.5	0	58	22	20	128
3....	6.2	1.0	1.0	10	12	4.3	0.5	0	46	29	15	63
4....	5.1	1.0	1.0	10	10	4.1	0.5	1.0	42	35	19	50
5....	4.7	1.0	1.0	10	11	3.3	0.5	1.5	34	16	15	30
6....	4.1	1.0	1.0	10	9.8	3.5	0.5	1.0	27	12	14	57
7....	3.7	1.0	1.0	10	9.5	6.2	0.5	0.8	25	12	14	570
8....	3.2	1.0	1.0	10	9.8	4.0	0.5	0.2	23	23	5	2350
9....	3.0	1.0	1.0	11	10	3.5	0.5	1.0	21	17	10	866
10....	2.6	1.0	0	11	9.8	3.3	0.2	307	14	28	12	558
11....	2.6	1.0	0	11	9.8	4.1	0.5	13	85	28	8	261
12....	2.6	1.0	0	14	9.5	3.7	0.5	36	30	29	7	144
13....	2.6	1.0	0	14	9.5	3.3	0.2	13	76	17	10	87
14....	2.6	1.0	0	14	9.2	2.8	0.2	11	72	55	14	55
15....	2.6	1.0	0	13	5.4	2.8	0.2	35	54	189	7	41
16....	2.6	1.0	0	13	2.0	2.6	0.2	104	35	97	3	35
17....	2.0	1.0	0	7.8	8.4	2.6	0.2	90	248	104	140	29
18....	2.0	1.0	0	7.0	8.9	2.0	0.2	1090	136	63	2100	24
19....	2.0	1.0	2.0	3.0	8.2	2.0	0.2	3010	100	16	400	22
20....	2.0	1.0	4.0	3.0	7.6	1.5	0.1	1030	88	6	144	17
21....	2.0	1.0	5.0	3.0	7.0	1.0	0.1	206	68	1380	70	15
22....	2.0	1.0	8.0	3.0	30	1.0	0.1	104	35	4010	35	14
23....	2.0	1.0	10	6.7	3.0	1.0	0.1	59	42	1670	24	12
24....	2.0	1.0	10	7.2	3.0	1.0	0	43	42	466	9	11
25....	2.0	1.0	10	4.7	7.0	1.0	6.7	97	37	112	30	11
26....	2.0	1.0	10	15	7.0	1.0	6.5	164	148	66	128	61
27....	2.0	1.0	10	5.1	5.9	0.8	3.7	136	766	61	26	30
28....	2.0	1.0	10	6.0	5.1	0.8	2.0	94	300	60	1460	20
29....	2.0	1.0	10	6.0	...	0.8	1.5	1550	124	52	1980	14
30....	2.0	1.0	10	8.2	...	0.5	1.0	1140	48	31	307	37
31....	1.0	...	10	13	...	0.5	...	194	25	97	...	...
Total	92.1	30	118	279.7	254.4	80.6	28.9	9532	2892	8763	7144	5866
Mean.	2.97	1.00	3.81	9.02	9.09	2.60	0.96	307	96.4	283	230	196
Max.	7.9	1	10	15	30	6.9	6.7	3010	766	4010	2100	2350
Min.	1	1	0	3	2	0.5	0	0	14	6	3	11
Acre-ft.	183	60	234	555	505	160	57	18910	5740	17380	14170	11640

Total run-off for water year 1934-35=69,590 acre-feet.

**Discharge of Purgatoire River at Nine Mile Dam Near Higbee, Colorado, for Year
Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	40	21	24	15	23	9.2	1.0	1.0	98	6.2	400	18
2....	27	19	22	15	24	8.8	1.0	1.0	87	1.0	133	19
3....	26	18	20	14	40	8.8	0.5	1.0	93	2.9	592	17
4....	24	20	20	14	24	10	0.5	0.5	59	0	1400	27
5....	23	15	19	16	22	9.6	0.8	0	58	0	460	9.8
6....	20	12	20	16	24	9.2	1.0	0	59	0	1740	30
7....	16	12	17	16	31	8.8	1.0	0	383	0	3290	26
8....	113	10	14	16	30	8.8	1.0	217	182	0	735	12
9....	96	11	17	17	27	7.6	3.2	500	63	0	946	22
10....	39	12	17	30	26	5.3	3.5	295	42	16	295	48
11....	31	12	17	36	27	4.3	1.8	261	34	44	107	28
12....	29	12	17	19	34	4.3	0.5	111	29	55	64	21
13....	25	12	17	18	42	4.1	0.2	80	34	64	45	14
14....	28	12	17	16	36	3.5	0	75	44	366	37	10
15....	27	12	17	17	38	3.3	0	70	29	141	32	4.1
16....	23	12	17	19	32	2.6	0	57	16	49	93	2.0
17....	20	14	17	18	45	2.3	0	57	14	28	64	1.5
18....	19	14	17	12	49	2.6	0	52	5.6	12	37	2.2
19....	18	14	17	19	38	3.3	0	787	3.5	0	28	26
20....	16	14	17	23	47	3.5	0	295	2.4	0	23	6.0
21....	14	15	17	19	46	2.6	0	146	1.5	0	19	2.0
22....	23	16	17	24	51	2.0	53	77	0.5	0	21	5.1
23....	22	16	17	21	30	2.0	40	52	0	0	18	107
24....	22	15	17	16	24	4.3	27	839	0	0	30	68
25....	23	16	17	17	19	3.5	18	761	3.7	0	23	72
26....	29	17	17	23	14	2.0	14	211	.19	0	21	36
27....	28	21	17	25	14	2.0	11	199	13	26	20	36
28....	25	22	17	22	12	1.0	4.5	366	10	1630	20	37
29....	23	23	17	19	10	1.0	3.7	470	9.2	2100	52	33
30....	23	24	17	21	...	1.0	2.4	410	40	1200	66	39
31....	22	...	17	24	...	1.0	...	173	...	1080	32	...
Total	914	463	547	597	879	142.3	189.6	6564.5	1432.4	6881.1	10843	778.7
Mean.	29.5	15.4	17.6	19.3	30.3	4.59	6.32	212	47.7	222	350	26.0
Max.	113	24	24	36	51	10	53	839	383	2100	3290	107
Min.	14	10	14	12	10	1.0	0	0	0	0	18	1.5
Acre-ft.	1810	918	1080	1180	1740	282	376	13020	2840	13650	21510	1540

Total run-off for water year 1935-36=59,950 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of Purgatoire River at Highland Dam, Near Las Animas, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	4	1	3	4	0	3	0	0	160	40	28	119
2....	4	1	6	4	0	2	0	0	102	21	19	215
3....	4	1	7	4	0	1	0	0	98	43	15	119
4....	4	1	8	4	2	0	0	0	83	22	12	90
5....	4	1	9	4	2	0	0	0	76	31	10	88
6....	3	1	10	4	1	0	0	0	45	15	10	75
7....	3	1	10	5	1	0	0	0	48	11	9	90
8....	3	1	10	4	1	0	0	0	41	73	8	3410
9....	3	1	11	4	1	0	0	4	5	67	7	725
10....	3	1	11	6	1	0	0	128	19	23	6	440
11....	2	1	11	7	1	0	0	137	17	9	5	220
12....	2	1	10	6	1	0	0	37	45	26	0	134
13....	2	1	4	9	1	0	0	17	28	19	0	113
14....	2	1	2	11	1	0	0	16	34	12	0	92
15....	2	1	1	14	0	0	0	18	50	56	0	75
16....	1	2	1	12	0	0	0	56	33	80	0	65
17....	1	2	1	10	0	0	0	150	160	53	0	51
18....	1	2	0	8	0	0	0	580	195	73	1410	25
19....	1	2	0	8	0	0	0	6040	116	34	548	24
20....	1	2	0	8	0	0	0	1010	80	13	195	17
21....	1	2	0	6	0	0	0	312	64	10	88	13
22....	1	2	1	4	0	0	0	180	26	3130	54	10
23....	1	2	1	3	0	0	0	155	32	1360	41	8
24....	1	2	2	1	0	0	0	128	19	645	24	6
25....	1	2	2	2	0	0	0	125	19	345	19	12
26....	1	2	3	3	0	0	0	215	19	190	35	140
27....	1	2	3	0	0	0	0	122	1160	131	70	100
28....	1	2	3	0	1	0	0	116	175	128	95	56
29....	1	2	3	0	0	0	0	612	170	85	2040	22
30....	1	2	4	0	0	0	0	1030	85	62	440	11
31....	1	4	0	0	0	0	0	337	...	45	170	...
Total	61	45	141	155	14	6	0	11525	3204	6852	5358	6565
Mean.	1.97	1.50	4.55	5.00	0.50	0.19	0	372	107	221	173	219
Max..	4	2	11	14	2	3	0	6040	1160	3130	2040	3410
Min..	1	1	0	0	0	0	0	0	5	9	0	6
Acre-ft.	121	89	280	307	28	12	0	22860	6360	13590	10630	13020

Total run-off for water year 1934-35 = 67,300 acre-feet.

Discharge of Purgatoire River at Highland Dam, Near Las Animas, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	44	7.0	22	11	4.0	1.8	0.0	0.0	156	31	626	19
2....	31	8.5	20	9.1	2.8	1.8	0.0	0.0	110	9.1	273	8.8
3....	24	10	20	14	4.0	1.2	0.0	0.0	136	2.2	445	11
4....	17	11	19	11	1.0	2.3	0.0	0.0	98	0.2	1070	29
5....	15	9.7	19	11	0.3	6.0	0.0	0.0	86	0.0	730	14
6....	15	11	19	4.2	0.3	6.4	0.0	0.0	68	0.0	1340	6.0
7....	14	10	19	3.6	0.6	6.8	0.0	0.0	116	0.0	5240	0.9
8....	13	13	17	4.0	0.2	5.4	0.0	505	221	0.0	959	2.0
9....	12	13	16	4.0	0.4	5.8	0.0	1380	116	24	615	12
10....	9.4	11	18	4.4	0.0	3.2	0.0	455	72	2.7	325	6.6
11....	10	11	18	6.0	0.6	2.0	3.8	341	116	0.5	128	30
12....	8.8	11	14	14	0.6	1.3	0.6	153	286	0.0	66	19
13....	7.6	12	16	15	0.0	1.0	0.0	107	125	24	47	10
14....	6.6	13	13	13	0.0	0.9	0.0	88	68	113	40	6.2
15....	5.8	14	7	8.8	0.0	0.2	0.0	86	49	182	37	4.2
16....	5.0	16	5.6	9.1	0.0	0.0	0.0	79	33	88	34	2.8
17....	4.2	15	6.6	7.6	1.8	0.0	0.0	62	22	41	46	1.9
18....	3.4	15	6.2	4.4	10	0.0	0.0	37	15	20	40	1.0
19....	3.0	16	5.6	2.7	7.0	0.4	0.0	312	12	20	33	0.7
20....	2.7	16	5.8	2.4	7.9	0.3	0.0	357	7.9	4.4	33	0.9
21....	2.4	15	4.6	4.0	11	0.2	0.0	349	4.2	2.8	30	8.2
22....	2.9	16	5.4	3.6	20	0.0	0.0	249	2.6	1.6	20	3.2
23....	3.8	15	7.3	5.4	63	0.0	0.0	142	1.8	0.3	13	1.9
24....	5.2	15	8.5	6.0	50	1.1	0.9	435	1.8	0.0	9.4	53
25....	7.3	16	5.0	3.4	24	1.3	12	1690	1.5	0.0	7.3	0.0
26....	7.6	17	10	1.8	11	0.0	7.6	397	1.3	0.0	11	4.2
27....	6.6	21	7.9	3.4	6.8	0.0	4.8	249	1.3	0.1	5.4	33
28....	7.0	21	13	2.9	3.4	0.0	2.5	445	1.1	1320	4.6	43
29....	8.2	21	13	2.9	2.8	0.0	1.5	604	0.0	2960	3.8	44
30....	4.2	22	15	2.8	...	0.0	0.0	593	5.4	1980	24	31
31....	4.4	...	8.5	2.9	0.0	0.0	0.0	238	...	868	36	...
Total	311.1	422.2	385.0	198.4	233.5	49.4	33.7	933	1933.9	7694.9	12291.5	445.3
Mean.	10.0	14.1	12.4	6.40	8.05	1.59	1.12	302	64.5	248	396	14.8
Max..	44	22	22	15	63	6.8	12	1690	286	2960	5240	53
Min..	2.4	7	4.6	1.8	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0
Acre-ft.	617	837	764	394	463	98	67	18550	3840	15260	24380	883

Total run-off for water year 1935-36 = 66,153 acre-feet.

Discharge of Holly Drain Near Holly, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	22	19	18	18	14	17	20	15	72	65	11	26
2....	22	21	18	18	14	21	20	17	57	46	10	15
3....	22	24	18	19	14	21	21	15	63	29	9	10
4....	22	21	18	19	14	19	22	16	128	12	11	10
5....	23	15	19	19	14	19	20	16	102	11	11	9
6....	24	15	24	19	14	18	21	18	65	16	11	10
7....	30	15	25	19	18	16	23	16	51	15	10	9
8....	32	15	25	19	21	16	24	15	42	13	10	8
9....	28	14	18	14	20	24	22	15	35	11	10	9
10....	28	14	17	14	19	20	27	15	28	9	11	25
11....	32	15	17	14	18	22	27	15	20	10	11	28
12....	30	15	16	13	18	20	20	15	24	126	11	28
13....	28	15	16	13	16	19	20	22	18	19	11	29
14....	27	15	16	14	12	19	23	38	26	22	11	20
15....	31	15	16	14	11	20	24	21	48	29	11	17
16....	26	15	16	13	15	18	25	19	57	12	11	18
17....	33	15	16	13	17	18	19	26	72	11	11	13
18....	31	15	16	13	17	18	16	39	57	10	11	10
19....	26	15	16	13	17	17	14	21	73	11	11	12
20....	24	15	16	13	16	17	14	48	56	12	12	11
21....	24	15	17	14	21	18	14	57	87	12	12	8
22....	23	16	17	13	19	18	14	50	60	11	11	7
23....	21	19	16	12	20	17	14	47	64	11	11	6
24....	17	16	17	13	14	18	13	43	58	12	11	6
25....	21	17	17	13	13	18	14	33	57	15	11	8
26....	16	18	17	13	14	18	14	27	42	12	11	12
27....	17	19	17	13	16	18	13	26	15	11	11	6
28....	17	18	18	13	18	19	14	26	12	10	810	14
29....	17	18	18	13	20	13	29	32	10	116	9	
30....	19	18	18	13	20	15	26	48	9	20		7
31....	19	18	13	20	67				9	21		
Total	752	497	551	454	454	583	560	853	1569	611	1260	400
Mean.	24.3	16.6	17.8	14.6	16.2	18.8	18.7	27.5	52.3	19.7	40.6	13.3
Max..	33	24	25	19	21	24	27	67	128	126	810	29
Min..	16	14	16	13	11	16	13	15	12	9	9	6
Acre-ft.	1490	986	1090	900	900	1160	1110	1690	3110	1210	2500	793

Total run-off for water year 1934-35=16,940 acre-feet.

Discharge of Holly Drain Near Holly, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	6.6	7.7	40	9.0	9.5	5.1	11	4.0	34	4.0	14	3.1
2....	10	9.5	22	7.9	8.0	6.0	4.7	4.4	40	5.9	12	4.6
3....	27	12	13	8.5	8.0	6.3	21	4.6	270	6.5	8.1	6.6
4....	36	11	11	7.2	6.6	7.4	18	7.0	56	4.3	4.8	1.6
5....	36	16	14	6.6	5.7	6.3	12	5.7	30	4.2	9.5	3.5
6....	32	19	14	7.0	5.0	5.4	17	4.9	11	4.0	11	2.6
7....	37	15	11	5.2	5.0	6.3	8.8	4.9	8.5	3.5	23	3.1
8....	37	18	11	5.4	4.0	6.6	5.6	5.6	7.4	3.5	44	7.4
9....	24	15	12	6.6	4.0	6.5	4.4	5.6	8.5	4.0	65	10
10....	26	12	12	4.9	4.0	9.5	4.9	11	14	4.0	93	8.3
11....	23	18	13	4.8	3.9	7.4	4.4	5.9	11	3.1	117	6.5
12....	27	32	19	4.4	2.7	3.2	4.9	5.1	8.1	4.3	139	2.8
13....	22	30	54	4.7	1.5	3.2	4.4	5.1	26	3.8	103	2.7
14....	22	32	41	5.2	2.0	3.1	3.7	5.4	17	2.8	88	3.1
15....	22	30	12	5.6	3.0	2.6	3.8	5.2	7.0	2.4	57	2.6
16....	22	24	9.0	5.6	4.0	2.1	4.3	4.9	4.2	2.1	49	3.2
17....	22	34	16	4.8	5.0	2.9	4.8	4.8	4.2	2.2	43	3.1
18....	22	28	24	4.7	5.6	2.5	4.2	4.6	4.3	3.3	34	3.5
19....	22	26	29	4.7	5.0	3.9	4.8	4.8	3.5	2.9	24	3.2
20....	22	36	30	4.3	4.0	2.7	4.9	6.3	3.3	4.4	12	2.6
21....	22	32	26	4.8	3.0	2.4	5.4	5.2	3.8	2.6	9.2	2.5
22....	21	35	11	4.9	4.5	4.0	4.6	4.9	3.3	2.7	7.2	4.6
23....	21	39	8.8	5.1	6.0	4.7	4.4	6.6	4.0	2.3	2.5	5.1
24....	14	41	7.9	4.8	7.2	4.8	4.8	53	4.3	2.0	3.8	8.3
25....	13	42	6.8	4.9	7.4	5.2	5.1	19	5.6	1.6	2.6	7.9
26....	11	46	12	4.6	6.3	15	5.6	11	7.7	1.4	2.6	4.9
27....	8.8	43	10	7.4	6.5	37	4.6	53	4.0	1.4	2.3	6.5
28....	7.7	28	11	8.5	5.2	23	3.9	151	3.3	1.4	5.1	23
29....	6.5	28	7.0	13	4.9	16	3.8	93	2.8	2.5	2.4	49
30....	6.5	38	6.5	2.9	....	23	3.7	238	3.2	12	2.2	44
31....	6.1	6.6	2.8	....	16	....	46	....	9.5	2.5		
Total	635.2	797.2	520.6	180.8	147.5	250.1	197.5	790.5	610.0	114.6	992.8	313.7
Mean.	20.5	26.6	16.8	5.83	5.09	8.07	6.58	25.5	20.3	3.70	32.0	10.5
Max..	37	46	54	13	9.5	37	21	238	270	12	139	66
Min..	6.1	7.7	6.5	2.8	1.5	2.1	3.7	4.0	2.8	1.4	2.2	2.5
Acre-ft.	1260	1580	1030	359	293	496	392	1570	1210	227	1970	622

Total run-off for water year 1935-36=11,009 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Wild Horse Creek at Holly, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	0	0	0	0	0	1.2	0	0	0	17	0	0
2....	0	0	0	0	0	0	0	0	0	4.6	0	0
3....	0	0	0	0	0	0	0	0	0	41	0	0
4....	0	12	0	0	0	0	0	0	0	0	0	0
5....	0	12	4.5	0	0	0	0	0	0	0	0	0
6....	0	12	4.5	0	0	0	0	0	0	0	0	0
7....	0	12	0	0	0	0	0	0	0	0	0	0
8....	0	9.8	0	0	0	0	0	0	0	0	0	0
9....	0	9.8	0	0	0	0	0	0	0	0	0	0
10....	0	9.8	0	0	0	0	0	0	0	0	0	0
11....	0	14	0	0	0	0	0	0	0	0	0	0
12....	0	14	0	0	0	0	0	0	0	62	0	0
13....	0	14	0	0	0	0	0	0	0	0	0	0
14....	0	7.8	0	0	5.5	0	0	0	0	0	0	0
15....	0	6.9	0	0	5.5	0	0	0	0	0	0	0
16....	0	6.9	0	0	0	0	0	0	0	0	0	0
17....	0	6.9	0	0	0	0	0	0	0	0	0	0
18....	0	6.9	0	0	7.5	0	0	0	0	0	0	0
19....	0	6.9	0	0	7.5	0	0	0	0	0	0	0
20....	0	6.9	0	0	7.6	0	0	0	0	0	0	0
21....	0	6.9	0	0	0	0	0	2.5	52	0	0	0
22....	0	6.9	0	0	1.0	0	0	0	21	0	0	0
23....	0	0	0	0	0	0	0	0	21	0	0	0
24....	0	0	0	0	0	0	0	0	23	0	0	0
25....	0	0	0	0	0	0	0	0	23	0	0	0
26....	0	0	0	0	0	0	0	0	0	0	0	0
27....	0	0	0	0	0	0	0	0	0	0	0	0
28....	0	0	0	0	0	0	0	0	0	0	0	0
29....	0	0	0	0	0	0	0	0	0	0	0	0
30....	0	0	0	0	0	0	0	0	0	0	0	0
31....	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	182.4	9	0	34.6	1.2	0	2.5	140	124.6	0	0
Mean.	0	6.08	0.29	0	1.24	0.04	0	0.08	4.67	4.02	0	0
Max..	0	14	4.5	0	7.6	1.2	0	2.5	52	62	0	0
Min...	0	0	0	0	0	0	0	0	0	0	0	0
Acre-ft.	0	362	18	0	69	2	0	5	278	247	0	0

Total run-off for water year 1934-35=981 acre-feet.

RIO GRANDE RIVER BASIN

RIO GRANDE RIVER AT THIRTY MILE BRIDGE NEAR CREEDE, COLORADO

Location—Water stage recorder in Sec. 13, T. 40 N., R. 4 W., thirty miles southwest of Creede and three-quarters of a mile below Rio Grande Reservoir.

Nearest Tributary—Squaw Creek enters just below station.

Drainage Area—163 square miles. Altitude, 9,380 feet above mean sea level.

Records Available—June 18, 1909, to September 30, 1923; May 16, 1925, to September 30, 1936.

Maximum discharge observed during period (1909-36); 7,500 second-feet June 28, 1927. Gage height 7.03 feet.

Maximum Discharge—Year 1935; 1,670 second-feet June 23, 1935. Gage height 4.01 feet.

Maximum Discharge—Year 1936; 1,210 second-feet May 3 and 4, 1936. Gage height 3.51 feet.

Accuracy—Records considered excellent except for those estimated from November 26 to March 4, 1935, and November 5 to March 16, 1936, computed on basis of reservoir gate openings.

Diversions for storage above station. Flow regulated by Rio Grande Reservoir just above station (Capacity 45,800 acre-feet).

RIO GRANDE RIVER AT WASON, BELOW CREEDE, COLORADO

Location—Water stage recorder in Sec. 8, T. 41 N., R. 1 E., at Wason, three miles southeast of Creede. (Datum lowered 0.25 foot October 2, 1934.)

Drainage Area—705 square miles. Altitude, 8,591 feet above mean sea level.

Records Available—April 24, 1907, to September 30, 1936.

Maximum discharge observed during period (1907-36); 9,750 second-feet, June 28, 1927. Gage height, 7.76 feet.

Maximum Discharge—Year 1935; 3,430 second-feet, June 24, 1935. Gage height 4.08 feet.

Maximum Discharge—Year 1936; 3,210 second-feet, May 5, 1936. Gage height, 3.48 feet.

Accuracy—Records considered excellent except for ice effect period from November 28 to March 14, 1936, and from November 3 to March 11, 1936, computed on basis of six discharge measurements, gage heights and weather records, which are fair.

Diversions for irrigation above station. Flow regulated by three reservoirs (total capacity, 117,600 acre-feet).

RIO GRANDE RIVER NEAR DEL NORTE, COLORADO

Location—Water stage recorder in Sec. 30, T. 40 N., R. 5 E., six miles west of Del Norte at State Bridge. From 1889 to September, 1907, station was maintained 4 miles below present station. Records are comparable.

Drainage Area—1,320 square miles. Zero of gage is 7,982.21 feet above mean sea level.

Records Available—October 11, 1889, to September 30, 1936.

Maximum discharge observed during period (1889-1936); about 18,000 second-feet (Revised), October 5, 1911. Gage height 6.80 feet from rating curve extended above 6,000 second-feet.

Maximum Discharge—Year 1935; 6,520 second-feet, June 16, 1935. Gage height, 4.93 feet.

Maximum Discharge—Year 1936; 3,993 second-feet, May 5, 1936. Gage height, 3.83 feet.

Accuracy—Records considered excellent except for period of ice effect from November 24 to March 20, 1935, and December 8 to March 19, 1936, which were computed on basis of nine discharge measurements and temperature records, and are good.

Diversions for irrigation above station. Flow regulated by three reservoirs above station (total capacity, 117,600 acre-feet).

RIO GRANDE RIVER NEAR MONTE VISTA, COLORADO

Location—Water stage recorder in Sec. 24, T. 39 N., R. 7 E., N.M.P.M., where Gunbarrel highway crosses river two miles north of Monte Vista.

Drainage Area—1,740 square miles. Zero of gage is 7,654.54 feet above mean sea level.

Records Available—May 1, 1926, to September 30, 1936.

Maximum discharge observed during period (1926-36), 18,500 second feet, (revised) June 30, 1927. Gage height, 7.85 feet.

Maximum Discharge—Year 1935; 3,660 second-feet, June 16, 1935. Gage height, 4.84 feet.

Maximum Discharge—Year 1936; 1,860 second-feet, May 5, 1936. Gage height, 3.43 feet.

Accuracy—Records considered excellent except those estimated November 24-28, December 18 to January 6, 1935, and those for ice effect period, December 11 to February 24, 1936, based on weather records, and comparison with records for station near Del Norte, which are fair.

Diversions for irrigation above station. Flow regulated by three main reservoirs (total capacity, 117,600 acre-feet) and several small reservoirs.

RIO GRANDE RIVER AT ALAMOSA, COLORADO

Location—Water stage recorder in Sec. 4, T. 37 N., R. 10 E., a quarter of a mile northwest of Alamosa. Prior to November 6, 1935, at site in Alamosa.

Zero of gage at present site is 7,533.66 feet above mean sea level.

Records Available—May 15, 1912, to September 30, 1936.

Maximum discharge observed during period 1912-36, 14,000 second-feet, July 1, 1927. Gage height, 8.37 feet.

Maximum Discharge—Year 1935; 2,300 second-feet, June 25, 1935. Gage height, 4.75 feet.

Maximum Discharge—Year 1936; 468 second-feet, May 6, 1936. Gage height, 2.97 feet.

Accuracy—Records considered good except for period of ice effect from November 27 to February 20, 1935, and December 10 to March 23, 1936, computed on basis of five discharge measurements, gage heights and weather records, which are fair.

Diversions for irrigation above station.

RIO GRANDE RIVER ABOVE MOUTH OF TRINCHERA CREEK NEAR LAS SAUSES, COLORADO

Location—Water stage recorder in Sec. 35, T. 36 N., R. 11 E., a quarter of a mile above mouth of Trinchera Creek and 5 miles north of Las Sauses.

Records Available—May to September 30, 1936.

Maximum Discharge—Year 1936; 456 second-feet, May 6, 1936. Gage height, 3.41 feet.

Accuracy—Records considered good except those for July 1 to August 4, computed on basis of four discharge measurements and records for station near Lobatos, which are fair.

Diversions for irrigation above station.

RIO GRANDE RIVER NEAR LOBATOS, COLORADO

Location—Water stage recorder in Sec. 22, T. 33 N., R. 11 E., 6 miles north of Colorado-New Mexico line at highway bridge and 10 miles east of Lobatos.

Drainage Area—7,700 square miles (includes 2,940 square miles in closed basin). Zero of gage is 7,426.79 feet above mean sea level.

Records Available—June 28, 1899, to September 30, 1936.

Maximum discharge observed during period 1899-1936, 13,100 second-feet, June 8, 1905.

Maximum Discharge—Year 1935; 4,620 second-feet, June 18, 1935. Gage height, 4.81 feet.

Maximum Discharge—Year 1936; 2,540 second-feet, May 7, 1936. Gage height, 3.61 feet.

Accuracy—Records considered excellent except for period of ice effect December 2 to February 25, 1935; November 28 to February 24, March 21-27, 1936, which were computed on basis of five and seven, respectively, discharge measurements and temperature records, and are good.

Diversions for irrigation above station.

CLEAR CREEK BELOW CONTINENTAL RESERVOIR, COLORADO

Location—Water stage recorder in Sec. 22, T. 42 N., R. 3 W., 1,000 feet below Continental Reservoir and fifteen miles west of Creede, Colorado.

Drainage Area—49 square miles.

Records Available—May 1, 1929, to September 30, 1936.

Maximum discharge observed during period 1929-36, 246 second-feet, June 2, 1933. Gage height, 3.14 feet.

Maximum Discharge—Year 1935; 233 second-feet, June 8, 1935. Gage height, 3.04 feet.

Maximum Discharge—Year 1936; 241 second-feet, May 5, 1936. Gage height, 2.81 feet.

Accuracy—Records considered good except those for October 1 to April 14, July 5, 6; August 25-31, 1935, and October 13 to April 15, May 11-23, August 3-8, which were estimated and computed on basis of gate openings at Continental Reservoir above station, which are fair.

Flow regulated by Continental Reservoir above station. (Capacity, 26,700 acre-feet).

SOUTH FORK RIO GRANDE RIVER AT SOUTH FORK, COLORADO

Location—Water stage recorder in Sec. 4, T. 39 N., R. 3 E., 1½ miles above mouth and 1½ miles southwest of South Fork. Records 1910-20 were obtained at a site 1 mile downstream and are comparable.

Drainage Area—216 square miles. Zero of gage is 8,221.79 feet above mean sea level.

Records Available—August, 1910, to December, 1920; May to September 30, 1936.

Maximum discharge observed during period 1910-20, 1936; about 5,000 second-feet October 5, 1911.

Maximum Discharge—Year 1936; 1,300 second-feet May 5, 1936. Gage height, 4.50 feet.

Accuracy—Records considered good.

Diversions for irrigation and several small storage reservoirs above station.

PINOS CREEK NEAR DEL NORTE, COLORADO

Location—Water stage recorder in Sec. 29, T. 39 N., R. 5 E., just below mouth of Bennett Creek, and 8 miles southwest of Del Norte.

Drainage Area—53 square miles.

Records Available—May, 1919, to September, 1924; May to September 30, 1936.

Maximum Discharge—Year 1936; 720 second feet (determined by slope area method) August 3, 1936. Gage height, 4.18 feet.

Accuracy—Records considered good except for those estimated July 18, 19, 26 and 29, which are fair.

One small diversion for irrigation above station.

SAN FRANCISCO CREEK NEAR DEL NORTE, COLORADO

Location—Water stage recorder in Sec. 31, T. 39 N., R. 6 E., 1 $\frac{1}{4}$ miles below mouth of East Fork and 6 miles south of Del Norte.

Drainage Area—13.1 square miles.

Records Available—April to September 30, 1936.

Maximum discharge observed during period 1936, 364 second-feet.

Maximum Discharge—Year 1936; 364 second-feet (slope area method) July 27, 1936. Gage height, 1.47 feet.

Accuracy—Records considered good except those estimated for August 3-6, which are fair.

Small diversions for irrigation above station.

ROCK CREEK NEAR MONTE VISTA, COLORADO

Location—Water stage recorder in Sec. 36, T. 38 N., R. 6 E., 3 miles below North Fork and 9 miles southwest of Monte Vista. April, 1919, to September, 1924, water stage recorder 1 $\frac{1}{2}$ miles downstream.

Drainage Area—33.6 square miles.

Records Available—April, 1919, to September, 1924; May to September 30, 1936.

Maximum Discharge—Year 1935; 154 second-feet August 11, 1935. Gage height, 2.65 feet.

Maximum Discharge—Year 1936; 142 second-feet August 6, 1936. Gage height, 2.53 feet.

Accuracy—Records considered good except for those estimated May 1-22, 1935, and those estimated for November 25, 26, April 20, May 9-17, 1936, which are fair.

Diversions for irrigation above station.

ROCK CREEK NEAR ALAMOSA COLORADO

Location—Water stage recorder in Sec. 7, T. 37 N., R. 10 E., below headgate of Hickory Ditch and 2½ miles west of Alamosa.

Records Available—May to November, 1936. (Discontinued.)

Maximum Discharge—Year 1936; 46 second feet May 21, 1936. Gage height, 1.60 feet.

Accuracy—Records considered good. Discharge for ice effect period from November 3, 4, 20-30, computed on basis of three discharge measurements, temperature records, and comparison with records for other streams.

Diversions for irrigation above station divert most of flow.

ALAMOSA RIVER ABOVE TERRACE RESERVOIR, COLORADO

Location—Water stage recorder in Sec. 8, T. 36 N., R. 6 E., three miles above Terrace Reservoir Dam and 15 miles northwest of Capulin.

Drainage Area—107 square miles.

Records Available—September, 1911, to June, 1912; April, 1914, to October, 1919; October, 1923, to September, 1927; October, 1934, to September 30, 1936.

Maximum daily discharge observed during period 1911-12, 1914-19, 1923-27, 1934-36, 4,250 second-feet October 5, 1911.

Maximum Discharge—Year 1935; 2,400 second-feet June 15, 1935. Gage height, 4.20 feet.

Maximum Discharge—Year 1936; 1,050 second-feet May 4, 1936. Gage height, 3.24 feet.

Accuracy—Records considered excellent except for estimated periods, November 23-30, 1935; April 1-5 and November 21-30, 1936, which are fair. No record December 1 to March 31, 1935, and December 1 to March 31, 1936.

No diversions above station.

ALAMOSA RIVER BELOW TERRACE RESERVOIR, COLORADO

Location—Water stage recorder in Sec. 23, T. 36 N., R. 6 E., in Canon, ½ mile below Terrace dam and 11 miles northwest of Capulin.

Drainage Area—116 square miles (revised). Altitude, 8,400 feet above mean sea level.

Records Available—April 18, 1909, to November 30, 1912; April 1, 1915, to October 31, 1915; February 1, 1917, to October 31, 1920; April 1, 1922, to September 30, 1936.

Maximum daily discharge observed during period 1909-1912, 1915, 1912-20, 1922-36, 1,450 second-feet, June 16, 17, 18, 1917.

Maximum Discharge—Year 1935; 1,330 second-feet June 24, 1935. Gage height, 4.99 feet.

Maximum Discharge—Year 1936; 490 second-feet May 7, 1936. Gage height, 3.39—.03 feet.

Accuracy—Records considered good except for periods when discharge was estimated on basis of gate openings at reservoir October 1 to March 29, 1935, and November 24 to April 6, 1936, which are fair.

Diversions for storage above station. Flow regulated by Terrace Reservoir, capacity, 17,700 acre-feet.

ALAMOSA RIVER NEAR CAPULIN, COLORADO

Location—Water stage recorder in Sec. 10, T. 35 N., R. 8 E., just above diversion of Union Ditch and 1 $\frac{1}{4}$ miles northeast of Capulin.

Drainage Area—138 square miles.

Records Available—May to November, 1936. (Discontinued.)

Maximum Discharge—Year 1936; 201 second-feet May 21, 1936. Gage height, 3.15 feet.

Accuracy—Records considered good except for ice effect periods, November 3, 4, 19-30, computed on basis of two discharge measurements and weather records, which are fair.

Diversions for irrigation and for storage by Terrace Reservoir (capacity 17,700 acre-feet) above station.

LA JARA CREEK NEAR CAPULIN, COLORADO

Location—Water stage recorder in Sec. 21, T. 34 N., R. 7 E., 9 miles southwest of Capulin and about 15 miles below La Jara Reservoir. Prior to 1924 station was located 2 miles upstream.

Drainage Area—73 square miles.

Records Available—April, 1916, to November 17, 1917; April 1, 1919, to November, 1935.

Maximum discharge observed during period 1916-17, 1919-35, 653 second-feet April 22, 1919. Gage height, 3.22 feet.

Maximum Discharge—Year 1935; 111 second-feet September 1, 1935. Gage height, 1.68 feet.

Accuracy—Records considered good except for those estimated, which are fair. No records January 1 to May 31, 1935.

Diversions for irrigation and storage above station. Flow regulated by La Jara Reservoir, capacity 14,040 acre-feet.

LA JARA CREEK AT GALLEGOS RANCH NEAR CAPULIN, COLORADO

Location—Water stage recorder in Sec. 32, T. 34 N., R. 7 E., 2 miles above old station called "La Jara Creek near Capulin, Colorado" (records not comparable), and 12 miles southwest of Capulin.

Drainage Area—73 square miles.

Records Available—May 1 to September 30, 1936.

Maximum Discharge—Year 1936; 327 second-feet (by slope area method) August 20, 1936. Gage height, 4.30 feet.

Accuracy—Records considered excellent.

Diversions for storage and irrigation above station. Flow regulated by La Jara Reservoir, capacity 14,040 acre-feet.

LA JARA CREEK BELOW EMPIRE CANAL NEAR SANFORD, COLORADO

Location—Water stage recorder in Sec. 6, T. 35 N., R. 10 E., 120 feet below diversion for Empire Canal, 3 miles north of Sanford.

Records Available—May 20 to November 30, 1936. (Discontinued.)

Maximum Discharge—Year 1936; 119 second-feet August 8, 1936. Gage height, 4.68 feet.

Accuracy—Records considered fair. Discharge for period of missing gage height record, June 20 to July 17, estimated on basis of five discharge measurements.

Diversions for irrigation above station.

TRINCHERA CREEK ABOVE TURNER'S RANCH, NEAR FORT GARLAND, COLORADO

Location—Water stage recorder in Sec. 2, T. 31 S., R. 71 W., above Turner's ranch and 7 miles southeast of Fort Garland.

Nearest Tributary—Station just below north and south forks.

Drainage Area—45 square miles.

Records Available—April 1, 1923, to September 30, 1936.

Maximum discharge observed during period 1923-36, 318 second-feet, May 23, 1926. Gage height, 2.54 feet.

Maximum Discharge—Year 1935; 178 second feet June 10, 1935. Gage height 2.02 feet.

Maximum Discharge—Year 1936; 86 second-feet May 16, 1936. Gage height 1.58 feet.

Accuracy—Records considered good except those estimated for March 1-26, 28-31, 1935; October 24-31, 1936, which are fair. No record November 1, 1934, to February 28, 1935, and November 7 to March 31, 1936.

No diversions above station.

TRINCHERA CREEK ABOVE MOUNTAIN HOME RESERVOIR, NEAR FORT GARLAND, COLORADO

Location—Water stage recorder in Sec. 31, T. 30 S., R. 71 W., at flume just above Mountain Home Reservoir, and 4 miles southeast of Fort Garland.

Drainage Area—61 square miles.

Records Available—May 1, 1923, to September 30, 1936.

Maximum discharge observed during period 1923-36, 385 second-feet, May 24, 1926. Gage height, 1.84 feet.

Maximum Discharge—Year 1935; 130 second feet June 6, 1935. Gage height, 1.48 feet.

Maximum Discharge—Year 1936; 67 second-feet May 18, 1936. Gage height, 1.06 feet.

Accuracy—Records considered good. No records November 1, 1934, to March 26, 1936, and November 7 to March 31, 1936.

Diversions for irrigation above station.

TRINCHERA CREEK BELOW SMITH RESERVOIR, NEAR BLANCA, COLORADO

Location—Water stage recorder in Sec. 5, T. 31 S., R. 73 W., 1 mile below Smith Reservoir and 5 miles southwest of Blanca, and 500 feet west of bridge on Blanca-San Acacia highway.

Drainage Area—396 square miles.

Records Available—October 1, 1929, to September 30, 1936.

Maximum discharge observed during period 1924-36, 164 second feet, May 15, 1932. Gage height, 2.90 feet.

Maximum Discharge—Year 1935; 66 second-feet June 15, 1935. Gage height, 1.88 feet.

Maximum Discharge—Year 1936; 66 second feet September 1, 1936. Gage height 1.95 feet.

Accuracy—Records considered good except for those estimated October 24 to February 18, 1936, on basis of reservoir losses and temperature records, which are fair.

Diversions for irrigation and storage above station. Flow regulated by Smith Reservoir, capacity 5,335 acre-feet.

TRINCHERA CREEK AT MOUTH NEAR LAS SAUSES, COLORADO

Location—Water stage recorder in Sec. 25, T. 31 S., R. 75 W., one-third mile above mouth and 5 miles north of Las Sauses.

Records Available—May 1 to November 30, 1936. (Discontinued.)

Maximum Discharge—Year 1936; 45 second-feet (ice effected) November 8, 1936.

Accuracy—Records considered fair. Discharge for period of ice effect November 3, 4, 7-12, 21-30, computed on basis of two discharge measurements, gage heights and weather records. May 1-8 estimated.

Diversions for irrigation above station.

SANGRE DE CRISTO CREEK NEAR FORT GARLAND, COLORADO

Location—Water stage recorder in Sec. 23, T. 30 S., R. 72 W., 1½ miles east of Fort Garland on Turner Ranch road.

Drainage Area—187 square miles.

Records Available—March 15 to October 9, 1916; May 1, 1923, to September 30, 1936.

Maximum discharge observed during period 1916, 1923-36, 1,520 second-feet August 31, 1936. Gage height, 6.10 feet.

Maximum Discharge—Year 1935; 328 second feet July 21, 1935. Gage height 3.85 feet.

Maximum Discharge—Year 1936; 1,520 second-feet (slope area method) August 31, 1936. Gage height 6.10 feet.

Accuracy—Records considered good except for those estimated for October 23-31, 1934, August 24, 25, October 21-31, 1935, and May 1-3, 1936, which are fair. No records November 1 to March 31, 1935, and November 1 to April 30, 1936.

Diversions for irrigation above station.

SANGRE DE CRISTO CREEK ABOVE SMITH RESERVOIR NEAR BLANCA, COLORADO

Location—Water stage recorder in Sec. 35, T. 30 S., R. 73 W., on county road 200 feet above bridge, three-fourths mile above Smith Reservoir and two miles south of Blanca. Datum lowered 1.06 feet April 1, 1936.

Drainage Area—231 square miles.

Records Available—April 24, 1929, to September 30, 1934; April to September, 1936.

Maximum discharge observed during period 1929-34, 1936, 301 second feet August 5, 1936. Gage height, 4.75 feet.

Maximum Discharge—Year 1936; 301 second-feet August 5, 1936. Gage height 4.75 feet.

Accuracy—Records considered poor. Discharge for July 4-9 estimated on basis of range in stage.

Diversions for irrigation above station.

UTE CREEK AT UPPER STATION NEAR FORT GARLAND, COLORADO

Location—Water stage recorder in Sec. 12, T. 29 S., R. 72 W., 150 yards below forks and 9 miles northeast of Fort Garland.

Drainage Area—23.3 square miles.

Records Available—May to July, 1936. (Discontinued.)

Maximum discharge observed during period, 554 second-feet by slope area method, July 27, 1936.

Maximum Discharge—Year 1936; 554 second-feet July 27, 1936. Gage height 3.04 feet.

Accuracy—Records considered good. Recorder shelter destroyed by flood on July 27th.

No diversions for irrigation above station.

UTE CREEK NEAR FORT GARLAND, COLORADO

Location—Water stage recorder in Sec. 10, T. 30 S., R. 7 W., at flume $2\frac{1}{2}$ miles north of Fort Garland.

Drainage Area—32 square miles.

Records Available—March 16 to October 8, 1916; May 1, 1923, to September 30, 1936.

Maximum discharge observed during period 1916, 1923-36, 353 second-feet, August 5, 1936. Gage height, 3.05 feet.

Maximum Discharge—Year 1935; 265 second-feet June 13, 1935. Gage height, 2.52 feet.

Maximum Discharge—Year 1936; 353 second-feet August 5, 1936. Gage height, 3.05 feet.

Accuracy—Records considered good. No record November 1 to March 26, 1935, and November 7 to March 31, 1936.

Diversions for irrigation above station.

CONEJOS RIVER NEAR MOGOTE, COLORADO

Location—Water stage recorder in Sec. 34, T. 33 N., R. 7 E., 12 miles west of Antonito at Broyles Bridge and $5\frac{1}{2}$ miles northwest of Mogote.

Drainage Area—282 square miles. Altitude, 8,300 feet above mean sea level.

Records Available—September 1, 1899, to March 31, 1900, and April 17, 1903, to October 31, 1905, at a point 1 mile below present station, March 21, 1907, to October 5, 1911, 3 miles above present station, January 1, 1912, to September 30, 1936, at present station.

Maximum Discharge—Year 1935; 3,680 second-feet June 16, 1935. Gage height, 4.93 feet.

Maximum Discharge—Year 1936; 2,400 second-feet May 5, 1936. Gage height, 4.35 feet.

Accuracy—Records considered excellent except for those estimated November 26 to March 19, 1935, November 29, March 22, 1936, computed on basis of six discharge measurements, gage heights and weather reports, which are fair.

No diversions or regulations above station.

CONEJOS RIVER NEAR LAS SAUSES, COLORADO

Location—Two water stage recorders in Sec. 2, T. 35 N., R. 11 E., 2 miles north of Las Sauses and one-half mile above mouth. Stream enters Rio Grande River through two channels and combined record is published.

Drainage Area—887 square miles. Altitude, North Channel zero of gage is 7,496.02 feet above mean sea level.

Records Available—March 29, 1921, to September 30, 1936.

Maximum daily discharge observed during period 1921-36, 3,650 second-feet, May 24, 1932.

Maximum Discharge—Year 1935; 2,800 second-feet June 17, 1935.

Maximum Discharge—Year 1936; 2,310 second-feet April 24, 1936.

Accuracy—Records considered good for year 1935 except for January 19-22, May 9-15, August 22 to September 7, by comparison of records of two channels which are fair. Records considered excellent for 1936.

Diversions for irrigation above station.

SAN ANTONIO RIVER AT ORTIZ, COLORADO

Location—Water stage recorder in Sec. 19, T. 32 N., R. 9 E., one-half mile south of Ortiz, just across state line and one-half mile above mouth of Los Pinos Creek.

Drainage Area—110 square miles.

Records Available—January 1 to October 31, 1915; May 1, 1919, to October 31, 1920; October 1, 1924, to September 30, 1936.

Maximum Discharge—Year 1935; 418 second-feet May 11, 1935. Gage height, 2.85 feet.

Maximum Discharge—Year 1936; 1,280 second-feet August 4, 1936. Gage height, 4.38 feet.

Accuracy—Records considered good except those estimated for October 1-31, 1934, April 1, September 2-15, 1935, and October 1 to November 30, 1935, which are fair. No records November 1 to March 31, 1935, and December 1 to March 23, 1936.

Small diversions for irrigation above station.

SAN ANTONIO RIVER AT MOUTH, NEAR MANASSA, COLORADO

Location—Water stage recorder in Sec. 21, T. 34 N., R. 10 E., 2½ miles east of Manassa and one mile above mouth near highway crossing. Prior to April 23, 1936, at site 200 feet upstream at bridge.

Drainage Area—348 square miles.

Records Available—April 1, 1923, to September 30, 1936.

Maximum discharge observed during period 1923-36, 1,890 second-feet, May 5, 1924.

Maximum Discharge—Year 1935; 1,160 second-feet May 30, 1935. Gage height, 5.22 feet.

Maximum Discharge—Year 1936; 1,260 second-feet April 23, 1936. Gage height, 5.61 feet.

Accuracy—Records considered good for 1935, except those estimated for ice period effect December 1 to March 21, 1935, and records considered excellent for 1936, except those estimated for period of ice effect October 29 to April 22, 1936, and May 16-21, 28, June 2-4, computed on basis of six and seven discharge measurements, and related records, which are fair.

Diversions for irrigation above station.

LOS PINOS RIVER NEAR ORTIZ, COLORADO

Location—Water stage recorder in Sec. 34 (revised), T. 32 N., R. 8 E., 3 miles southwest of Ortiz.

Drainage Area—167 square miles. Altitude, 8,100 feet above mean sea level.

Records Available—January 1, 1914, to November 30, 1920; October 1, 1924, to September 30, 1936.

Maximum discharge observed during period 1914-20, 1924-36, 2,300 second-feet, May 21, 1920. Gage height, 6.10 feet.

Maximum Discharge—Year 1935; 1,420 second-feet May 27, 1935. Gage height 4.39 feet.

Maximum Discharge—Year 1936, 1,640 second-feet April 21, 1936. Gage height, 4.63 feet.

Accuracy—Records considered good except those estimated for November 21-30, 1934; June 13-17, 20-23, September 4-15, 1935, and those for ice effect October 25, to November 7, 1935, computed on basis of gage heights and weather records, which are fair. No record December 1 to March 22, 1935; November 8 to March 23, 1936.

Diversions for irrigation above station.

CULEBRA RIVER AT SAN LUIS, COLORADO

Location—Water stage recorder in Sec. 35, T. 3 N., R. 72 W. (Beaubien Grant Survey), 1 mile southeast of San Luis. Twelve foot Parshall Flume since May 1, 1931.

Drainage Area—220 square miles.

Records Available—May 1, 1909, to September 2, 1919; April 1, 1927, to September 30, 1936.

Maximum Discharge—Year 1935; 442 second-feet August 2, 1935. Gage height, 4.00 feet.

Maximum Discharge—Year 1936; 236 second-feet June 3, 1936. Gage height, 2.73 feet.

Accuracy—Records considered good except those estimated for December 1 to March 31, 1935.

Diversions for irrigation and storage above station. Flow regulated by Sanchez Reservoir, capacity 103,100 acre-feet.

CULEBRA RIVER AT MOUTH NEAR SAN ACACIA, COLORADO

Location—Water stage recorder in Sec. 36, T. 3 N., R. 75 W. (Beaubien Grant Survey), 600 feet above mouth and 9 miles southwest of San Acacia.

Records Available—May to November, 1936. (Discontinued.)

Maximum Discharge—Year 1936; 188 second-feet (slope area method) August 20, 1936. Gage height, 2.26 feet.

Accuracy—Records considered fair. Daily discharge computed from rating curve based on two slope-area determinations.

Practically all water used for irrigation above station.

COSTILLA CREEK AT MOUTH NEAR JAROSA, COLORADO

Location—Water stage recorder in Sec. 32, T. 1 N., R. 74 W., 2 miles above mouth and 6 miles southwest of Jarosa.

Records Available—May 13 to November 30, 1936. (Discontinued.)

Maximum Discharge—Year 1936; 0 second-feet.

Accuracy—Records considered excellent.

Diversions for irrigation and storage above station.

LA GARITA CREEK NEAR LA GARITA, COLORADO

Location—Water stage recorder in Sec. 10, T. 41 N., R. 6 E., at Curby ranch, 4 miles southwest of La Garita Post Office. Gage moved a quarter of a mile upstream November 14, 1935, and set to independent datum. Records comparable for both sites.

Drainage Area—61 square miles.

Records Available—April 1, 1919, to September 30, 1936.

Maximum discharge observed during period 1919-36, 316 second-feet, May 10, 1924.

Maximum Discharge—Year 1935; 75 second-feet August 30, 1935. Gage height, 2.03 feet.

Maximum Discharge—Year 1936; discharge not determined July 31, 1936. Gage height, 2.08 feet.

Accuracy—Records considered good except for those estimated October 1-7, 1934; April 1-11, 1935, and during period of ice effect October 30 to November 30, 1935, computed on basis of gage heights and weather records, and those estimated for August 20-23, 1936, which are fair. No records during winter.

Diversions for irrigation above station.

CARNERO CREEK NEAR LA GARITA, COLORADO

Location—Water stage recorder in Sec. 26, T. 42 N., R. 6 E., 3 miles northwest of La Garita at O'Dell ranch.

Drainage Area—117 square miles.

Records Available—April 1, 1919, to September 30, 1936.

Maximum discharge observed during period 1919-1936, 500 second feet, April 14, 1924.

Maximum Discharge—Year 1935; 315 second feet August 25, 1935. Gage height 2.10 feet.

Maximum Discharge—Year 1936; discharge not determined. Gage height, 2.09 feet.

Accuracy—Records considered good except for records estimated October 1-6, April 4-10, 1935, and those for October, 1936, which are fair. No records November 1 to March 24, 1935, and from November 1 to April 26, 1936.

Diversions for irrigation above station.

SAGUACHE CREEK NEAR SAGUACHE, COLORADO

Location—Water stage recorder in Sec. 11 (revised), T. 45 N., R. 6 E., at Ward's ranch, 10 miles west of Saguache.

Drainage Area—595 square miles.

Records Available—August 7, 1910, to September 23, 1912; June 1, 1914, to September 30, 1936.

Maximum discharge observed during period 1910-12, 1914-36, 746 second-feet, June 15, 1921. Gage height, 3.45 feet, former datum.

Maximum Discharge—Year 1935; 452 second feet June 12, 1935. Gage height, 2.42 feet.

Maximum Discharge—Year 1936; 139 second-feet April 23, 1936. Gage height, 1.44 feet.

Accuracy—Records considered good except for those estimated for November 26-30, 1934; March 1-17, April 29 to May 4, 1935, and October 31, 1935; March 6-12, 1936, which are fair. No records December 1 to February 28, 1935, and November 1 to February 26, 1936.

Diversions for irrigation above station.

**KERBER CREEK AT ASHLEY RANCH NEAR
VILLA GROVE, COLORADO**

Location—Water stage recorder in Sec. 7, T. 46 N., R. 8 E., at Ashley ranch, 10 miles west of Villa Grove.

Drainage Area—38 square miles.

Records Available—June, 1923, to September, 1926; May to September 30, 1936.

Maximum Discharge—Year 1936; 306 second-feet (slope-area method) July 30, 1936. Gage height, 2.83 feet.

Accuracy—Records considered excellent except those for August 1 to September 30, which are good.

No diversions above station.

NORTH CRESTONE CREEK NEAR CRESTONE, COLORADO

Location—Water stage recorder in Sec. 5, T. 43 N., R. 12 E., 3 miles above junction with South Crestone Creek, and 1½ miles above Crestone.

Records Available—1915; May to September 30, 1936.

Maximum discharge observed during period 1915-1936.

Maximum Discharge—Year 1936; 735 second-feet by slope-area determination, August 6, 1936. Gage height, 4.33 feet.

Accuracy—Records considered good except those for July 15-21, which were estimated by comparison with other streams, and are fair.

No diversions above station.

SOUTH CRESTONE CREEK NEAR CRESTONE, COLORADO

Location—Water stage recorder in Sec. 32, T. 2 N., R. 1 E. (Baca Grant Survey), at Crestone—Cottonwood mine highway, 1½ miles southeast of Crestone.

Records Available—1915; May to November, 1936. (Discontinued.)

Maximum Discharge—Year 1936; 39 second-feet August 6, 1936. Gage height, 1.67 feet.

Accuracy—Records considered good. Discharge for ice effect period from November 3, 4, 24-30, computed on basis of three discharge measurements, gage heights and weather records.

No diversions above station.

WILLOW CREEK NEAR CRESTONE, COLORADO

Location—Water stage recorder in Sec. 4, T. 1 N., R. 1 E. (Baca Grant Survey), 3 miles southeast of Crestone, near old railroad road bed.

Records Available—1915; May to November, 1936. (Discontinued.)

Maximum Discharge—Year 1936; 385 second-feet (by slope-area method) August 6, 1936. Gage height, 3.53 feet.

Accuracy—Records considered good. Discharge for period of ice effect November 3, 4, 24-30, computed on basis of three discharge measurements, weather records and gage heights.

No diversions above station.

SPANISH CREEK NEAR CRESTONE, COLORADO

Location—Water stage recorder in Sec. 9, T. 1 N., R. 1 E. (Baca Grant Survey), about 6 miles southeast of Crestone.

Records Available—1915; May to November, 1936. (Discontinued.)

Maximum Discharge—Year 1936, 493 second-feet by slope-area method, August 5, 1936. Gage height, 4.13 feet.

Accuracy—Records considered good except those for October 1-13, which were estimated on basis of two discharge measurements and comparison with records for other streams.

COTTONWOOD CREEK NEAR CRESTONE, COLORADO

Location—Water stage recorder in Sec. 28, T. 1 N., R. 1 E. (Baca Grant Survey), at Cottonwood Mining Camp, 6 miles south of Crestone.

Records Available—1915; May to November, 1936. (Discontinued.)

Maximum Discharge—Year 1936; 257 (slope-area method) second-feet August 6, 1936. Gage height, 3.13 feet.

No diversions above station.

DEADMAN CREEK NEAR CRESTONE, COLORADO

Location—Water stage recorder in Sec. 2, T. 1 S., R. 1 E. (Baca Grant Survey), at mouth of Deadman Canon, 8 miles southeast of Crestone.

Records Available—1915; May to November, 1936. (Discontinued.)

Maximum Discharge—Year 1936; 46 second-feet July 28, 1936. Gage height, 1.53 feet.

Accuracy—Records considered good except those for September 2 to November 30, which are fair. Daily discharge for period September 2 to November 30, is the combined flow past the gage and diversion canal just above.

No other diversions for irrigation above station.

ARENA CREEK NEAR CRESTONE, COLORADO

(Known Locally as Sand Creek)

Location—Water stage recorder in Sec. 31, T. 25 S., R. 73 W., at edge of Sand Dunes, 14 miles southeast of Crestone.

Records Available—May to November, 1936. (Discontinued.)

Maximum Discharge—Year 1936; 232 second-feet (slope-area method) August 6, 1936. Gage height, 2.32 feet.

Accuracy—Records considered good except those for May 1-5, October 8-17, and for period of ice effect, November 24-30, computed on basis of discharge measurements, gage heights, weather records and comparison with other streams, which are fair.

No diversions above station. Water sinks into sand approximately 1 mile below station except at very high stages.

STATE ENGINEER, COLORADO

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Discharge of Rio Grande River at Thirty-Mile Bridge Near Creede, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	75	30	...	...	...	1	27	108	427	834	611	238
2	70	30	...	...	...	1	27	96	437	810	604	208
3	64	30	...	...	...	2	27	67	579	787	542	176
4	64	30	...	...	...	2	27	99	542	704	579	176
5	53	30	...	...	...	11	41	88	344	497	561	176
6	50	39	...	...	...	22	51	114	156	464	554	178
7	50	44	...	...	...	27	48	121	10	497	531	90
8	50	44	...	...	...	27	48	140	15	508	486	59
9	56	44	...	...	...	27	48	136	12	646	514	64
10	50	39	...	...	...	27	48	160	4	1040	497	64
11	50	38	...	...	...	27	235	190	5	1040	514	64
12	51	32	...	...	...	26	344	206	15	858	525	64
13	51	31	...	...	...	26	386	188	9	803	520	64
14	51	30	...	...	...	26	427	176	12	787	503	64
15	52	30	...	...	...	26	414	165	15	771	464	57
16	51	30	...	...	...	27	332	176	18	625	418	54
17	40	27	...	...	...	27	165	169	19	492	386	54
18	37	24	...	...	...	27	79	165	21	404	378	54
19	36	24	...	...	...	27	96	156	30	414	400	54
20	36	15	...	...	...	27	130	169	188	475	448	54
21	36	2	...	...	...	27	138	172	915	475	481	54
22	37	2	...	...	...	27	149	190	1580	400	464	54
23	37	2	...	...	...	27	138	238	1610	361	352	54
24	36	2	...	...	...	27	101	297	1540	277	386	54
25	36	2	...	...	...	27	91	378	818	217	448	54
26	31	2	...	...	...	27	103	404	548	332	448	68
27	30	2	...	...	...	27	132	443	795	423	464	90
28	30	2	...	...	...	27	142	464	958	409	464	123
29	30	2	...	...	...	27	145	470	850	573	448	123
30	30	2	...	...	...	27	128	456	850	660	336	85
31	30	...	...	...	...	27	...	503	...	618	287	...
Total	1400	661	...	...	...	710	4267	6934	13322	18201	14613	2771
Mean.	45.2	22.0	2.00	2.00	1.00	22.9	142	224	444	587	471	92.4
Max..	75	44	...	...	...	27	427	503	1610	1040	611	238
Min..	30	2	...	...	...	1	27	67	4	217	287	54
Acre-ft.	2780	1310	123	123	56	1410	8460	13750	26420	36100	28980	5500

Total run-off for water year 1934-35 = 125,012 acre-feet.

Discharge of Rio Grande River at Thirty-Mile Bridge Near Creede, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72	6	...	...	...	8	26	495	885	381	130	193
2	72	6	...	...	...	8	26	568	759	346	152	154
3	72	6	...	...	...	8	26	966	590	328	172	145
4	71	6	...	...	...	8	26	1100	546	308	200	214
5	71	...	...	...	...	8	26	184	320	289	230	180
6	71	...	...	...	...	8	26	38	516	304	212	139
7	70	...	...	...	...	8	26	242	718	341	35	129
8	70	...	...	...	...	8	26	509	777	386	123	129
9	53	...	...	...	...	8	26	583	786	502	200	122
10	34	...	...	...	...	8	35	568	678	531	170	118
11	32	...	...	...	...	8	49	488	630	646	152	118
12	37	...	...	...	...	8	79	546	654	759	158	118
13	40	...	...	...	...	8	143	885	678	710	162	118
14	52	...	...	...	...	8	158	966	718	242	162	118
15	59	...	...	...	...	8	168	1060	686	178	141	118
16	59	...	...	...	...	8	195	1000	694	174	132	118
17	58	...	...	...	...	12	328	876	742	145	132	118
18	54	...	...	...	...	12	392	795	759	145	132	108
19	48	...	...	...	...	16	422	734	777	166	130	102
20	48	...	...	...	...	23	300	742	750	143	160	102
21	48	...	...	...	...	27	292	831	654	130	172	102
22	48	...	...	...	...	31	356	858	606	154	156	102
23	48	...	...	...	...	38	495	948	386	118	134	102
24	48	...	...	...	...	42	702	948	386	108	111	102
25	48	...	...	...	...	42	702	930	614	102	93	93
26	48	...	...	...	...	41	560	957	670	102	89	86
27	48	...	...	...	...	40	622	966	560	110	89	89
28	48	...	...	...	...	40	702	966	481	125	89	88
29	16	...	...	...	...	31	718	1010	434	132	105	6
30	6	...	...	...	...	35	630	1030	398	154	125	2
31	6	...	...	...	...	29	...	993	...	136	170	...
Total	1555	180	186	186	203	587	8282	23782	18852	8395	4418	3382
Mean.	50.2	6	6	6	7	18.9	276	767	628	271	143	113
Max..	72	...	...	...	...	42	718	1100	885	759	230	214
Min..	6	...	...	...	...	8	26	38	320	102	35	2
Acre-ft.	3080	357	369	369	403	1160	16430	47170	37390	16650	8760	6710

Total run-off for water year 1935-36 = 138,848 acre-feet.

**Discharge of Rio Grande River at Wason, below Creede, Colorado, for Year
Ending Sept. 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	235	112	80	65	79	75	189	329	1280	1830	1140	563
2....	216	123	80	60	79	80	213	294	1330	1760	1100	502
3....	206	99	80	55	79	85	243	307	1710	1710	1010	446
4....	202	120	80	55	79	90	243	286	1980	1650	1030	425
5....	196	120	80	55	79	95	227	294	1680	1380	1100	404
6....	182	126	79	55	79	100	216	325	1750	1240	1030	384
7....	169	126	79	55	79	100	182	320	1640	1330	1070	420
8....	169	123	79	60	79	100	185	334	1710	1300	1010	394
9....	163	126	79	63	79	100	160	425	2060	1350	1030	338
10....	166	126	79	64	79	110	147	415	2250	1720	992	312
11....	160	123	78	65	78	120	199	508	2480	1800	1020	290
12....	163	126	78	67	78	120	490	670	2200	1640	1030	274
13....	169	112	78	68	77	125	576	629	2150	1460	1000	266
14....	163	112	78	70	77	130	707	563	2300	1400	974	254
15....	156	112	78	70	77	135	752	502	2510	1410	929	246
16....	153	107	78	72	76	129	737	563	2430	1280	895	235
17....	150	126	75	72	76	129	479	570	1780	1100	871	239
18....	135	117	75	73	75	123	352	520	1650	1010	830	235
19....	129	107	75	73	74	112	334	526	1760	974	830	227
20....	126	94	75	74	74	99	399	615	1950	1020	854	220
21....	123	97	75	74	74	104	384	602	2510	1080	912	213
22....	123	58	75	74	74	112	430	608	3050	1010	929	213
23....	120	65	75	74	74	115	457	670	3020	863	830	213
24....	115	82	75	74	74	115	399	807	3100	783	854	227
25....	120	77	75	74	74	102	329	1040	2440	643	879	254
26....	123	68	70	75	74	115	294	1220	1830	602	854	258
27....	115	72	70	75	74	126	334	1180	1920	807	879	307
28....	112	72	70	76	74	126	370	1370	2180	768	863	334
29....	110	72	70	77	77	135	356	1420	1900	1010	830	338
30....	110	94	70	77	77	156	379	1500	1880	1260	745	329
31....	110	....	70	78	....	189	....	1510	....	1200	615	....
Total	4689	3094	2358	2119	2144	3552	10762	20922	62430	38390	28935	9360
Mean.	151	103	76.1	68.4	76.6	115	359	675	2081	1238	933	312
Max..	235	126	80	78	79	189	752	1510	3100	1830	1140	563
Min..	110	58	70	55	74	75	147	286	1280	602	615	213
Acre-ft.	9300	6140	4680	4200	4250	7050	21350	41500	123800	76150	57390	18570

Total run-off for water year 1934-35=374,380 acre-feet.

**Discharge of Rio Grande River at Wason, Below Creede, Colorado, for Year
Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	290	129	75	....	....	80	122	1060	1660	647	348	480
2....	250	160	87	....	....	80	122	1300	1440	614	397	438
3....	243	115	75	....	....	80	129	1940	1140	570	459	433
4....	243	117	80	....	....	80	134	2600	960	559	486	535
5....	231	97	87	....	....	80	127	2180	844	518	570	496
6....	220	102	72	....	....	85	124	1210	780	524	804	412
7....	216	107	75	....	....	85	134	804	1120	547	559	362
8....	209	107	70	....	....	85	181	1120	1210	553	417	344
9....	202	115	88	....	....	85	229	950	1230	682	547	339
10....	196	129	90	73	74	85	233	972	1180	759	486	325
11....	189	99	85	....	....	80	312	870	1060	960	438	344
12....	189	102	85	....	....	88	397	972	1090	1140	448	334
13....	192	97	85	....	....	100	553	1410	1090	1060	454	321
14....	189	97	85	....	....	113	621	1560	1100	773	459	312
15....	199	84	85	....	....	111	634	1740	1150	530	469	300
16....	199	87	83	....	....	109	759	1910	1100	502	407	288
17....	196	87	83	....	....	113	950	1520	996	469	412	284
18....	189	102	83	....	....	124	1130	1520	1060	422	412	284
19....	189	58	83	....	....	129	1100	1570	1010	433	412	276
20....	209	63	83	....	....	127	940	1620	996	407	469	264
21....	206	80	81	....	....	146	844	1630	940	387	513	260
22....	202	89	81	....	....	146	1090	1580	852	397	459	272
23....	202	110	81	....	....	127	1280	1630	773	353	402	268
24....	199	104	81	....	....	118	1380	1690	668	308	344	252
25....	202	112	81	74	....	141	1400	1700	766	280	312	244
26....	199	117	78	....	....	129	1240	1640	900	292	288	236
27....	206	68	78	....	....	141	1210	1620	836	316	272	240
28....	199	82	78	....	....	151	1340	1630	752	308	272	248
29....	209	87	78	....	....	151	1370	1750	724	321	280	181
30....	166	110	78	....	....	151	1100	1840	689	372	382	167
31....	135	....	78	....	....	132	....	1840	....	348	438	....
Total	6365	3013	2512	2294	2175	3452	21185	47378	30116	16351	13415	9539
Mean.	205	100	81.0	74	75	111	706	1528	1040	528	433	318
Max..	290	160	90	....	....	151	1400	2600	1660	1140	804	535
Min..	135	58	70	....	....	80	122	804	668	280	272	167
Acre-ft.	12620	5980	4980	4350	4310	6850	42020	93970	59730	32430	26610	18920

Total run-off for water year 1935-36=312,970 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Rio Grande River Near Del Norte, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	308	193	130	158	140	210	406	621	2530	3400	1620	828
2....	300	205	110	138	140	210	434	548	2500	3230	1440	755
3....	292	190	90	111	140	210	492	548	3100	3150	1320	680
4....	276	192	100	113	140	213	492	516	3820	3090	1260	617
5....	268	218	105	102	135	220	468	548	3630	2660	1420	597
6....	260	218	100	104	145	220	434	567	3880	2370	1330	577
7....	246	218	110	120	150	220	371	607	3950	2470	1350	604
8....	239	222	120	104	150	220	371	674	4100	2450	1300	695
9....	236	215	125	117	145	240	356	777	4540	2450	1270	584
10....	236	218	130	117	150	240	278	844	5000	2710	1350	526
11....	236	210	135	111	150	250	294	1010	5400	2830	1270	481
12....	236	205	130	122	150	250	406	1210	4940	2710	1320	450
13....	250	205	130	124	150	250	705	1330	4850	2450	1290	427
14....	250	199	135	133	150	260	870	1230	5130	2260	1200	416
15....	246	199	140	145	160	270	1040	1070	5620	2280	1140	393
16....	239	190	145	148	170	286	1140	1100	5810	2010	1080	382
17....	236	208	140	150	170	270	981	1200	4470	1780	1060	368
18....	236	215	140	150	180	250	761	1160	4140	1740	995	363
19....	222	202	145	150	184	240	628	1140	4250	1730	977	348
20....	220	182	135	150	180	228	744	1270	4650	1640	977	339
21....	215	180	150	150	180	228	777	1260	5130	1700	1020	325
22....	215	161	160	150	180	216	810	1260	5740	1730	1070	325
23....	215	169	155	150	190	228	844	1330	5510	1470	1040	308
24....	205	180	150	150	190	245	802	1570	5710	1350	1000	299
25....	200	167	150	150	190	238	642	1910	4980	1180	1050	325
26....	205	163	150	150	200	245	567	2350	3950	1150	1060	348
27....	205	150	145	160	200	270	586	2430	3950	1290	1130	393
28....	200	152	160	160	200	270	658	2550	4140	1230	1100	421
29....	195	143	165	160	200	286	642	2700	3630	1420	1050	450
30....	193	135	150	160	200	333	705	2920	3630	1770	1040	432
31....	193	...	155	160	200	391	...	3040	...	1730	888	...
Total	7273	5704	4185	4267	4609	7707	18704	41290	132680	65430	36417	14056
Mean.	235	190	135	138	165	249	623	1332	4423	2111	1175	469
Max..	308	222	165	160	200	391	1140	3040	5810	3400	1620	828
Min..	193	135	90	102	135	210	278	516	2500	1150	888	299
Ac.-ft.	14430	11310	8300	8460	9140	15290	37100	81900	263200	129800	72230	27880

Total run-off for water year 1934-35=679,040 acre-feet.

Discharge of Rio Grande River Near Del Norte, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	416	233	167	140	160	195	202	1690	2440	853	470	663
2....	393	269	158	150	170	200	178	1920	2070	810	488	642
3....	363	261	164	160	180	210	202	2510	1800	730	595	642
4....	363	244	167	150	180	210	208	3310	1550	700	615	778
5....	363	214	193	140	170	220	202	3350	1460	671	746	730
6....	348	214	176	140	160	220	190	2530	1310	642	1170	636
7....	344	248	155	140	150	220	196	1730	1620	649	1120	550
8....	334	240	160	140	160	225	261	1870	1760	636	715	512
9....	330	248	170	150	160	226	350	1580	1810	778	754	488
10....	321	252	170	163	173	230	367	1540	1870	853	723	458
11....	299	240	160	160	175	230	482	1410	1840	1000	649	500
12....	290	203	155	165	175	230	649	1510	1870	1280	622	482
13....	290	221	145	160	180	235	887	1830	1840	1170	588	452
14....	290	225	150	150	180	235	1110	2130	1800	1040	588	441
15....	286	207	140	150	180	235	1110	2160	1830	663	602	412
16....	290	193	95	160	180	240	1280	2580	1630	602	537	389
17....	290	200	95	170	180	250	1560	2480	1490	569	506	384
18....	282	233	100	150	180	260	1760	2300	1430	512	500	389
19....	273	200	105	140	170	255	1690	2480	1380	500	500	406
20....	321	158	105	140	170	252	1580	2570	1370	506	602	389
21....	312	183	105	140	170	244	1510	2550	1280	470	738	361
22....	299	186	95	140	170	257	1840	2490	1180	488	686	356
23....	294	210	110	140	170	225	2080	2460	1140	458	569	350
24....	286	203	110	140	170	187	2020	2570	944	406	506	334
25....	303	225	110	140	175	202	2160	2570	992	367	458	319
26....	316	233	110	150	180	181	2070	2480	1180	340	418	308
27....	325	176	115	160	180	187	1980	2440	1120	412	395	329
28....	316	143	120	170	185	229	1990	2460	1040	441	400	350
29....	321	179	125	170	190	229	2070	2490	954	418	441	324
30....	308	167	125	170	233	1760	2620	944	476	550	289	...
31....	252	...	125	160	248	2600	...	500	693	...	...	...
Total	9818	6408	4180	4698	5027	7000	33944	71210	44944	19940	18944	13663
Mean.	317	214	135	152	173	226	1131	2297	1498	643	611	455
Max..	416	269	193	170	190	260	2160	3350	2440	1280	1170	778
Min..	252	143	95	140	150	181	178	1410	944	340	395	289
Ac.-ft.	19470	12710	8290	9320	9970	13880	67330	141200	89150	39550	37570	27100

Total run-off for water year 1935-36=475,540 acre-feet.

Discharge of Rio Grande River Near Monte Vista, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	14	12	162	170	274	20	9	166	768	934	412	278
2....	14	13	169	160	317	6	9	111	793	793	274	274
3....	14	16	166	150	298	6	8	123	1030	768	173	229
4....	14	28	166	140	322	7	26	151	1360	737	96	132
5....	14	37	114	130	328	7	28	144	1160	486	173	64
6....	14	50	144	125	173	29	18	109	1180	242	216	64
7....	14	53	148	120	120	30	12	64	1220	192	166	48
8....	14	46	155	151	79	11	18	57	1210	260	169	98
9....	14	16	173	233	96	8	55	96	1470	467	180	169
10....	14	12	180	264	29	7	62	180	2030	611	212	117
11....	14	12	192	251	37	8	46	242	2350	729	129	93
12....	14	12	192	220	180	7	61	449	2060	713	126	84
13....	14	11	188	188	184	7	70	591	1860	611	135	73
14....	14	12	196	204	93	6	68	505	1970	486	91	57
15....	14	13	176	138	62	6	75	394	2460	618	53	42
16....	14	14	184	138	57	7	62	382	3060	564	64	35
17....	14	13	229	144	34	6	114	461	2070	618	93	30
18....	14	12	200	132	50	7	96	512	1390	577	93	17
19....	14	12	190	141	66	7	84	550	1370	537	81	15
20....	14	12	180	138	32	6	129	647	1640	537	77	13
21....	14	20	180	233	15	8	151	584	2010	570	64	15
22....	14	37	180	204	13	7	117	430	2600	611	55	17
23....	14	66	180	200	12	5	106	449	2840	376	50	18
24....	14	66	180	212	12	7	104	591	3120	298	37	14
25....	14	60	180	220	12	6	104	683	2860	388	61	13
26....	14	60	180	212	12	6	111	842	1780	418	52	53
27....	13	70	180	220	24	5	148	713	1270	359	86	55
28....	12	80	180	238	18	6	144	721	1400	274	141	77
29....	12	180	180	200	...	6	158	900	1140	278	155	88
30....	12	180	180	200	...	6	141	900	1080	394	238	93
31....	12	180	255	...	6	892	...	499	348	...	...	...
Total	425	1225	5484	5731	2949	266	2334	13639	52551	15945	4300	2375
Mean.	13.7	40.8	177	185	105	8.58	77.8	440	1752	514	139	79.2
Max..	14	180	229	264	328	30	158	900	3120	934	412	278
Min...	12	11	114	120	12	5	8	57	768	192	37	13
Acre-ft.	843	2430	10880	11370	5850	528	4630	27050	104200	31630	8530	4710

Total run-off for water year 1934-35=212,651 acre-feet.

Discharge of Rio Grande River Near Monte Vista, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	88	120	180	145	165	138	25	567	670	32	50	140
2....	77	196	180	155	160	111	54	670	553	32	36	129
3....	61	204	184	160	160	106	98	806	574	27	70	125
4....	52	188	188	155	180	88	24	1270	525	25	111	229
5....	45	162	184	150	175	103	21	1350	525	27	150	256
6....	43	141	184	145	165	90	22	742	402	30	375	212
7....	42	162	188	145	155	81	24	333	425	48	512	140
8....	37	180	180	140	155	86	22	588	518	133	141	80
9....	35	155	173	140	165	81	24	678	546	159	60	46
10....	34	166	173	145	175	133	24	648	512	136	122	26
11....	32	162	170	150	185	141	21	532	518	86	83	19
12....	29	138	165	160	180	136	40	532	525	159	46	30
13....	29	135	165	160	185	122	79	640	539	62	40	23
14....	28	144	160	150	190	77	206	774	506	113	20	14
15....	26	138	150	150	190	70	353	618	499	168	17	12
16....	24	129	115	150	190	68	655	750	473	171	17	9
17....	30	151	110	155	190	50	718	539	391	181	17	7
18....	32	173	115	160	190	52	560	448	353	174	20	8
19....	32	173	120	150	200	36	375	655	280	138	20	9
20....	40	148	125	145	210	38	318	758	227	138	24	10
21....	55	138	125	140	210	27	370	742	188	124	162	10
22....	46	158	125	140	250	50	512	686	138	127	140	12
23....	55	144	120	140	285	44	560	694	136	130	102	13
24....	120	176	125	140	260	38	518	774	88	86	58	13
25....	126	169	125	140	252	50	574	742	58	90	26	14
26....	158	180	130	150	206	127	466	640	124	100	21	16
27....	188	204	130	155	206	130	397	567	113	111	26	33
28....	188	176	130	160	196	81	425	588	93	153	23	89
29....	176	188	135	170	174	66	648	567	54	122	26	129
30....	169	192	135	170	...	46	567	686	36	116	41	122
31....	132	...	145	170	...	40	...	726	75	143	...	...
Total	2229	4890	4634	4685	5604	2506	8700	21310	10589	3273	2699	1975
Mean.	71.9	163	149	151	193	80.8	290	687	353	106	87.1	65.8
Max..	188	204	188	170	285	141	718	1350	670	181	512	256
Min...	24	120	110	140	155	27	21	333	36	25	17	7
Acre-ft.	4420	9700	9190	9290	11120	4970	17260	42270	21000	6490	5350	3920

Total run-off for water year 1935-36=145,000 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Rio Grande River at Alamosa, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	11	6	85	120	300	22	14	55	29	476	34	41
2....	11	6	96	110	340	22	14	70	28	416	34	30
3....	11	8	110	100	320	18	11	68	33	324	34	25
4....	11	11	120	95	340	17	11	61	119	290	29	26
5....	11	11	130	90	340	17	11	52	284	242	29	22
6....	11	11	130	85	195	17	12	59	163	198	29	22
7....	11	8	130	80	180	17	12	58	98	146	29	22
8....	11	8	130	95	130	16	12	58	148	112	24	23
9....	11	8	130	144	80	16	12	56	125	86	24	23
10....	11	6	130	185	110	16	12	72	342	55	29	24
11....	11	6	135	170	40	17	12	62	849	48	24	24
12....	11	8	135	140	50	17	12	48	1190	41	29	22
13....	11	19	139	110	195	14	12	47	1010	35	29	22
14....	11	19	140	120	200	14	12	76	888	49	26	22
15....	11	15	140	60	100	14	12	99	1130	42	26	23
16....	11	15	140	60	70	10	12	52	1540	35	24	23
17....	11	15	140	65	65	10	12	51	1960	35	24	23
18....	11	15	140	60	45	10	12	51	1220	35	24	24
19....	11	15	140	60	60	15	12	49	747	35	24	24
20....	11	15	140	65	70	15	12	64	647	62	24	24
21....	11	15	140	150	40	15	12	62	860	62	24	25
22....	11	15	140	135	33	16	12	94	1240	48	24	28
23....	11	19	140	130	23	16	12	40	1760	70	24	28
24....	11	19	140	140	23	16	12	23	1980	48	20	29
25....	11	19	140	152	27	13	12	22	2200	48	20	29
26....	11	15	140	150	27	13	12	22	1800	48	20	29
27....	11	22	140	160	27	13	24	26	948	34	20	30
28....	6	22	140	170	27	14	29	22	676	34	20	30
29....	3	26	140	140	...	14	48	21	676	34	20	30
30....	3	44	140	140	...	14	62	30	517	34	20	30
31....	3	...	140	200	...	14	...	34	34	20	...	...
Total	312	441	4120	3681	3457	472	476	1604	25207	3256	781	147
Mean.	10.1	14.7	133	119	123	15.2	15.9	51.7	840	105	25.2	25.9
Max..	11	44	140	200	340	22	62	99	2200	476	34	41
Min..	3	6	85	60	23	10	11	21	28	34	20	22
Acre-ft.	619	875	8170	7300	6860	936	944	3180	50000	6460	1550	1540

Total run-off for water year 1934-35=88,434 acre-feet.

Discharge of Rio Grande River at Alamosa, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	30	161	240	150	165	184	31	39	73	44	85	29
2....	30	114	240	155	165	173	33	33	94	45	54	34
3....	30	80	242	160	170	157	29	46	63	45	44	29
4....	30	49	252	155	180	155	28	85	70	42	47	26
5....	30	49	252	150	175	146	28	293	65	41	106	35
6....	30	25	265	145	160	155	29	341	63	38	65	59
7....	30	26	258	140	160	153	34	128	52	36	130	35
8....	30	36	246	135	160	141	34	66	44	35	235	30
9....	30	36	235	136	170	114	32	123	45	36	107	26
10....	30	45	215	150	180	90	31	118	52	23	67	24
11....	30	45	210	155	190	88	29	93	51	25	56	23
12....	30	44	205	160	185	93	27	67	49	33	45	22
13....	30	45	200	155	195	85	20	44	42	38	41	20
14....	30	50	190	155	195	70	20	46	58	36	34	19
15....	30	50	185	155	195	60	21	99	47	29	31	18
16....	30	51	150	155	195	58	28	45	38	27	28	18
17....	30	52	115	160	195	50	101	84	34	31	26	17
18....	30	59	120	170	200	45	146	44	31	46	25	16
19....	30	78	125	165	224	41	101	32	29	45	23	16
20....	30	106	135	140	230	29	59	49	29	35	28	15
21....	30	106	135	138	235	36	45	79	36	33	31	15
22....	30	99	135	145	270	34	50	73	45	47	55	15
23....	30	118	130	145	320	34	65	51	36	46	39	15
24....	30	126	135	145	278	35	86	46	40	55	35	15
25....	80	152	135	145	246	32	66	73	41	54	34	15
26....	105	206	140	145	223	41	104	70	41	39	32	17
27....	187	222	140	150	218	28	51	47	44	36	28	22
28....	161	227	140	160	208	32	36	42	46	41	26	23
29....	136	229	145	170	204	28	32	58	45	63	28	33
30....	114	233	150	170	...	26	45	47	46	85	29	60
31....	80	...	150	170	...	29	...	60	...	98	28	...
Total	1583	2919	5615	4729	5891	2462	1441	2521	1449	1327	1642	741
Mean.	51.1	97.3	181	153	203	79.4	48.0	81.3	48.3	42.8	53.0	24.7
Max..	187	233	265	170	320	184	146	341	94	98	235	60
Min..	30	25	115	135	160	26	20	32	29	23	23	15
Acre-ft.	3140	5790	11140	9380	11680	4880	2860	5000	2870	2630	3260	1470

Total run-off for water year 1935-36=64,100 acre-feet.

**Discharge of Rio Grande River Above Mouth of Trinchera Creek, Near Las Sauses,
Colorado, for the Year Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	134	9	4	67
2	134	8	4	70
3	137	7	4	74	
4	135	7	4	79	
5	305	135	6	4	84
6	404	140	6	4	88
7	327	130	6	4.8	93
8	238	113	6	3.2	98
9	204	94	6	239	93
10	248	74	6	176	88
11	246	67	7	163	84
12	228	63	7	130	76
13	198	55	7	115	70
14	192	50	7	94	65
15	204	50	6	80	63
16	206	48	5	72	62
17	198	38	4	72	60
18	228	35	4	73	58
19	202	26	4	73	56
20	204	41	4	76	55
21	190	26	4	82	52
22	168	24	4	83	56
23	155	17	3	110	53
24	157	15	3	112	55
25	172	13	3	109	56
26	153	12	3	96	55
27	153	12	3	82	86
28	140	11	3	79	82
29	124	11	3	76	99
30	124	10	3	73	104
31	130	..	4	70	.
Total	5498	1850	158	2395.8	2181
Mean	May 5	61.7	5.1	77.3	72.7
Max.	to	140	9	239	104
Min.	31	10	3	4.0	52
Acre-ft.	10910	3670	313	4750	4330

Total run-off for the period=23,973 acre-feet.

Discharge of Rio Grande River Near Lobatos, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	60	138	164	377	134	61	66	1540	1990	204	164
2	52	65	146	173	377	107	61	78	1250	1760	184	184
3	52	62	160	182	331	116	53	73	1310	1600	184	214
4	50	65	182	191	348	134	39	61	1490	1380	192	229
5	48	62	195	204	336	137	35	84	1720	1320	214	239
6	48	62	204	232	348	116	33	113	1830	1200	214	234
7	44	62	200	227	353	110	25	116	2060	1080	204	214
8	44	65	191	177	309	110	27	100	2220	1010	192	188
9	42	65	182	209	309	204	32	113	2240	911	219	180
10	40	65	173	232	293	107	28	214	2340	794	192	172
11	42	62	168	223	262	94	27	418	2620	736	204	172
12	42	62	182	218	247	113	24	598	3240	688	196	180
13	44	65	204	177	204	94	21	680	3220	664	196	172
14	50	70	214	218	173	94	18	629	2850	629	204	160
15	55	76	209	237	200	110	18	598	3030	598	168	153
16	50	76	195	186	160	100	20	494	3530	644	141	145
17	45	80	182	92	182	94	17	501	4220	560	137	123
18	45	83	160	122	209	94	17	629	4420	545	126	126
19	45	83	160	118	218	89	24	990	3390	552	110	116
20	45	86	142	110	182	113	25	1060	2800	560	104	107
21	50	102	191	191	195	97	22	1170	2750	582	97	97
22	50	83	195	160	155	89	20	1010	3000	605	94	97
23	50	76	200	142	138	78	17	960	3440	621	89	97
24	50	151	186	164	134	81	18	1000	3820	621	86	100
25	52	89	186	195	50	76	32	1190	4040	598	104	97
26	58	96	191	227	149	76	78	1370	4090	629	104	107
27	58	99	177	257	164	73	59	1650	3680	501	100	130
28	58	58	223	293	156	68	42	1760	2900	360	100	141
29	58	102	214	336	...	68	37	1790	2580	306	100	149
30	58	146	209	353	...	68	39	1680	2230	266	104	164
31	58	..	173	359	...	68	..	1760	..	234	123	.
Total	1533	2378	5732	6369	6559	3112	969	22935	83850	24544	4686	4651
Mean	49.5	79.3	185	205	234	100	32.3	740	2795	792	151	155
Max.	58	151	223	359	377	204	78	1790	4420	1930	219	239
Min.	40	58	138	92	50	68	17	61	1250	234	86	97
Acre-ft.	3040	4720	11370	12630	13010	6170	1920	45490	166300	48680	9290	9230

Total run-off for water year 1934-35=331,850 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Rio Grande River Near Lobatos, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	172	300	400	295	272	415	179	1230	662	24	18	137
2....	176	289	400	275	275	402	152	1180	595	23	22	141
3....	180	289	430	265	257	382	162	1300	491	22	23	162
4....	184	260	380	245	236	376	162	1610	435	23	28	166
5....	180	271	420	265	258	370	152	1920	382	20	50	170
6....	160	266	420	255	269	345	118	2300	370	19	74	166
7....	156	260	420	250	271	357	179	2230	376	19	86	175
8....	164	249	420	235	284	357	148	1610	351	19	103	155
9....	172	244	420	233	288	351	134	1350	297	24	231	141
10....	168	249	400	247	312	332	124	1160	231	24	303	127
11....	164	249	350	242	310	291	124	1010	192	22	262	121
12....	160	249	300	246	324	291	130	902	175	23	226	134
13....	156	244	240	324	314	252	920	152	22	192	192	134
14....	156	239	260	246	330	326	572	1060	124	19	166	115
15....	164	229	225	253	345	291	822	1210	103	19	137	112
16....	164	219	205	253	340	252	1070	1310	98	17	118	106
17....	153	200	190	250	364	236	1450	1630	78	16	109	98
18....	153	224	215	230	362	210	1780	1810	63	19	121	98
19....	164	219	250	243	360	170	1850	1770	52	14	137	95
20....	180	234	250	233	386	162	1670	1700	43	14	201	93
21....	184	254	245	233	364	162	1650	1510	54	15	188	88
22....	176	254	245	238	390	162	1850	1390	37	16	215	88
23....	153	244	255	241	377	160	2130	1170	30	13	215	98
24....	200	289	270	251	455	160	2270	1050	26	11	210	95
25....	209	266	285	252	535	160	1990	1030	29	9	192	98
26....	244	324	295	254	477	160	1990	960	26	8	179	112
27....	300	398	285	256	415	165	2060	782	23	8	159	93
28....	330	400	290	261	395	175	1810	686	23	14	141	184
29....	379	400	280	266	408	179	1790	640	26	12	141	179
30....	360	400	285	251	....	179	1690	588	24	14	134	220
31....	324	....	285	230	....	175	....	662	....	13	141	....
Total	6185	8212	9615	7754	9983	8067	30460	39680	5568	535	4522	3901
Mean.	200	274	310	250	344	260	1015	1280	186	17.3	146	130
Max..	379	400	430	295	535	415	2270	2300	662	24	303	220
Min..	153	200	190	230	236	160	118	588	23	8	18	88
Acre-ft.	12270	16290	19070	15380	19800	16000	60420	78700	11040	1060	8970	7740

Total run-off for water year 1935-36=266,740 acre-feet.

Discharge of Clear Creek Below Continental Reservoir, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	8	39	126	26	47	26
2....	8	36	105	26	45	17
3....	8	35	104	26	45	17
4....	8	26	170	26	45	14
5....	8	20	215	24	43	12
6....	8	22	195	24	49	9
7....	8	22	176	22	46	12
8....	8	61	216	22	21	16
9....	8	77	11	22	21	18
10....	8	71	11	24	34	12
11....	8	125	11	22	39	9
12....	8	118	8	23	40	9
13....	8	50	8	23	54	9
14....	8	42	4	30	55	10
15....	8	52	4	42	36	14
16....	10	66	6	37	31	24
17....	17	63	6	34	34	20
18....	16	51	6	31	33	20
19....	20	37	7	30	33	20
20....	24	46	6	29	33	18
21....	23	42	1	28	33	17
22....	23	45	0	27	33	17
23....	26	53	0	26	31	17
24....	31	72	1	26	33	18
25....	28	125	39	26	30	18
26....	28	185	54	26	30	15
27....	31	173	33	27	30	35
28....	34	152	23	26	30	38
29....	38	138	26	57	30	37
30....	39	142	26	82	30	34
31....	143	....	54	30	....
Total	8	8	8	8	8	8	508	2329	1598	948	1124
Mean.	8	8	8	8	8	8	16.9	75.1	53.3	30.6	36.3	18.4
Max..	39	185	216	82	55	38
Min..	8	20	0	22	21	9
Acre-ft.	492	476	492	492	444	492	1010	4620	3170	1880	2230	1090

Total run-off for water year 1934-35=16,890 acre-feet.

**Discharge of Clear Creek Below Continental Reservoir, Colorado, for Year
Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	15	.	.	.	.	.	9	84	70	35	18	26
2.	11	.	.	.	.	.	9	84	66	31	15	19
3.	10	.	.	.	.	.	9	95	65	27	15	22
4.	10	.	.	.	.	.	9	104	64	30	16	22
5.	10	.	.	.	.	.	9	190	56	28	18	25
6.	10	.	.	.	.	.	9	144	56	26	20	24
7.	10	.	.	.	.	.	9	111	56	19	34	22
8.	11	.	.	.	.	.	9	93	56	20	33	29
9.	10	.	.	.	.	.	9	71	56	34	22	32
10.	10	.	.	.	.	.	9	66	56	58	22	29
11.	11	.	.	.	.	.	9	66	52	60	23	30
12.	11	.	.	.	.	.	9	66	58	58	24	21
13.	10	.	.	.	.	.	9	66	56	52	23	18
14.	10	.	.	.	.	.	9	62	55	50	23	23
15.	10	.	.	.	.	.	9	62	53	49	24	21
16.	10	.	.	.	.	.	84	62	53	48	30	20
17.	10	.	.	.	.	.	177	58	52	42	32	20
18.	10	.	.	.	.	.	177	58	50	40	32	15
19.	10	.	.	.	.	.	185	58	49	22	34	14
20.	10	.	.	.	.	.	185	54	50	28	40	16
21.	10	.	.	.	.	.	186	54	50	42	40	18
22.	10	.	.	.	.	.	190	50	49	42	32	18
23.	10	.	.	.	.	.	177	50	37	26	26	19
24.	10	.	.	.	.	.	168	48	26	20	26	18
25.	10	.	.	.	.	.	152	48	31	18	26	26
26.	10	.	.	.	.	.	142	50	33	17	24	19
27.	10	.	.	.	.	.	141	69	36	17	17	16
28.	10	.	.	.	.	.	130	79	35	20	24	16
29.	10	.	.	.	.	.	103	73	36	24	33	15
30.	10	.	.	.	.	.	86	71	36	25	30	15
31.	10	.	.	.	.	.	71	.	25	32	.	.
Total	319	300	310	279	261	279	2418	2317	1498	1033	808	628
Mean.	10.3	10	10	9	9	9	80.6	74.7	49.9	33.3	26.1	20.9
Max..	15	.	.	.	.	.	190	190	70	60	40	30
Min..	10	.	.	.	.	.	9	48	26	17	15	14
Acre-ft.	633	595	615	533	518	553	4800	4600	2970	2050	1600	1250

Total run-off for water year 1935-36=20,717 acre-feet.

**Discharge of South Fork of Rio Grande River at South Fork, Colorado, for
Year Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	824	126	78	148	.
2.	742	116	80	129	.
3.	528	100	94	173	.
4.	860	485	92	102	173	.
5.	1020	465	88	196	136	.
6.	950	495	85	227	122	.
7.	688	556	80	182	108	.
8.	506	616	79	169	101	.
9.	396	649	92	152	97	.
10.	322	732	94	129	87	.
11.	297	830	150	120	119	.
12.	336	836	138	117	97	.
13.	414	800	105	101	87	.
14.	470	782	88	93	86	.
15.	556	732	85	91	74	.
16.	688	528	87	86	68	.
17.	732	396	85	87	66	.
18.	754	346	83	93	68	.
19.	866	318	79	97	69	.
20.	914	294	74	138	66	.
21.	902	254	68	162	61	.
22.	866	240	72	146	63	.
23.	860	222	62	106	65	.
24.	872	211	58	93	56	.
25.	866	192	56	87	55	.
26.	818	178	56	83	53	.
27.	830	158	85	80	63	.
28.	872	152	87	85	65	.
29.	884	138	81	111	62	.
30.	902	140	94	204	67	.
31.	926	.	91	167	.	.
Total	20367	13839	2736	3756	2684	.
Mean.	May	461	88.3	121	89.5	.
Max..	4 to	836	150	227	173	.
Min..	31	138	56	78	53	.
Acre-ft.	40400	27450	5430	7450	5320	.

Total run-off for period=86,050 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of Pinos Creek Near Del Norte, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	74	87	23	22	28
2	89	80	20	18	27
3	111	72	18	47	32
4	122	72	18	31	27
5	124	64	16	69	23
6	99	63	14	39	21
7	71	62	15	31	19
8	58	58	16	30	18
9	58	52	20	24	18
10	54	52	24	27	18
11	60	51	34	24	19
12	79	50	22	24	18
13	98	47	16	21	16
14	96	45	14	26	15
15	105	42	13	28	13
16	129	41	13	24	12
17	129	38	13	27	12
18	116	36	16	23	13
19	116	33	14	21	12
20	118	31	11	49	11
21	114	28	11	45	10
22	108	27	10	36	10
23	102	25	9.2	31	11
24	98	25	8.6	28	10
25	96	24	9.2	27	10
26	100	21	10	26	11
27	109	95	21	20	13
28	93	92	24	23	13
29	78	91	24	21	16
30	67	94	24	37	14
31	96	.....	18	29	.....
Total	2992	1319	506	948	490
Mean.	96.5	44.0	16.3	30.6	16.3
Max..	129	87	34	69	32
Min..	54	21	8.6	18	10
Acre-ft.	5930	2620	1000	1880	972

Total run-off for period=12,380 acre-feet.

Discharge of San Francisco Creek Near Del Norte, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	13	2.8	3.6	7.0
2	13	11	2.8	4.4	6.6
3	16	10	3.0	6.6	6.3
4	11	9.6	3.0	6.0	6.0
5	13	8.8	2.8	13	6.0
6	11	8.3	2.8	11	5.9
7	8.8	7.4	2.8	9.6	5.6
8	7.4	6.7	2.8	10	4.8
9	7.0	5.8	2.6	12	4.4
10	6.4	5.5	2.8	12	3.8
11	7.0	5.2	2.6	11	3.3
12	7.9	4.9	2.5	9.6	3.1
13	11	4.3	2.0	8.1	2.9
14	12	4.3	2.0	8.1	2.7
15	15	4.0	2.0	7.3	2.5
16	22	4.0	2.2	7.0	2.9
17	14	3.7	2.3	7.0	2.9
18	21	3.7	2.2	6.0	3.1
19	19	3.5	2.3	6.0	2.5
20	20	3.3	2.2	8.1	2.4
21	19	3.3	2.5	8.1	2.2
22	17	3.7	2.6	7.6	2.7
23	17	3.8	2.5	8.1	2.5
24	17	3.7	2.3	8.6	2.5
25	16	3.3	2.2	8.1	2.2
26	17	3.5	2.2	7.6	2.4
27	13	16	3.5	11	2.5
28	11	16	3.5	7.6	2.5
29	9.6	15	3.2	8.1	2.5
30	7.0	15	3.0	8.1	2.5
31	15	.....	2.8	7.0	.....
Total	424.5	161.5	88.4	252.9	109.2
Mean.	14.0	5.38	2.85	8.16	3.64
Max..	22	13	11	13	7.0
Min..	6.4	3.0	2.0	3.6	2.2
Acre-ft.	862	320	175	502	217

Total run-off for period=2,076 acre-feet.

Discharge of Rock Creek Near Monte Vista, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	56	26	18	9
2	40	53	27	15	10
3	40	46	26	14	9
4	40	45	23	15	8
5	40	59	21	17	7
6	45	66	19	15	7
7	45	74	18	16	9
8	45	79	17	14	10
9	45	83	16	15	8
10	45	76	16	14	7
11	48	69	14	17	6
12	48	62	15	14	5
13	48	64	13	13	5
14	48	67	14	13	5
15	48	79	13	13	5
16	50	65	11	14	5
17	50	55	11	14	5
18	50	51	15	13	5
19	50	53	15	9	4
20	50	58	15	9	4
21	50	55	15	10	5
22	50	50	14	11	5
23	51	47	13	10	4
24	63	44	11	10	4
25	67	40	10	9	6
26	71	37	12	9	6
27	72	36	13	10	6
28	67	36	11	9	6
29	65	32	10	8	5
30	65	28	16	9	5
31	59	23	9	...	...
Total	1595	1665	493	386	185
Mean	51.4	55.5	15.9	12.4	6.17
Max.	72	83	27	18	10
Min.	40	28	10	8	4
Acre-ft.	3160	3300	978	766	367

Total run-off for period=8,571 acre-feet.

Discharge of Rock Creek Near Monte Vista, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	...	5	3	...	...	...	...	39	24	9.1	10	14	
2	...	5	3	...	...	...	...	46	23	8.4	8.4	13	
3	...	4	3	...	...	...	...	49	22	8.1	27	14	
4	...	4	...	...	...	...	...	50	21	7.2	31	12	
5	...	5	...	...	...	...	...	47	19	5.6	24	9.8	
6	...	4	...	...	...	...	...	34	18	5.3	27	8.7	
7	...	4	...	...	...	...	...	31	16	5.3	30	8.0	
8	...	4	...	...	...	...	...	24	14	5.9	25	8.0	
9	...	4	...	...	...	...	...	23	14	8.7	23	8.4	
10	...	4	...	...	...	...	...	22	14	11	21	8.4	
11	...	4	...	...	...	...	...	24	14	10	22	8.0	
12	...	4	...	...	...	...	...	33	13	7.8	21	7.3	
13	...	4	...	...	...	...	...	48	12	6.5	19	5.8	
14	...	4	...	...	...	...	...	24	45	11	6.5	21	5.2
15	...	4	...	...	...	...	...	22	44	9.8	6.8	21	4.6
16	...	3	...	...	...	...	...	24	47	9.4	6.8	15	4.6
17	...	3	...	...	...	...	...	26	45	9.1	6.8	15	4.3
18	...	3	...	...	...	...	...	27	43	8.7	6.8	14	4.9
19	...	3	...	...	...	...	...	22	44	8.7	6.5	12	6.4
20	...	5	...	...	...	...	...	25	43	8.4	5.9	20	6.1
21	...	4	...	...	...	...	...	36	41	7.5	6.2	25	5.8
22	...	4	...	...	...	...	...	36	38	7.5	5.9	21	6.4
23	...	3	...	...	...	...	...	40	36	9.1	5.3	19	6.4
24	...	4	...	...	...	...	...	38	32	8.7	4.4	18	6.1
25	...	4	...	...	...	...	...	40	30	8.7	3.7	18	5.8
26	...	4	...	...	...	...	...	41	29	10	3.2	16	6.7
27	...	4	...	...	...	...	...	38	28	12	6.8	16	7.0
28	...	3	...	...	...	...	...	39	28	11	13	16	7.3
29	...	3	...	...	...	...	...	37	28	9.4	13	20	7.7
30	...	3	...	...	...	...	...	34	28	9.4	9.1	18	7.7
31	...	2	...	...	...	...	...	26	...	15	15	15	...
Total	118	...	...	...	...	...	...	549	1125	382.4	230.6	608.4	228.4
Mean	3.8	...	...	...	...	...	...	April	36.3	12.7	7.44	19.6	7.61
Max.	5	...	...	...	...	...	...	14 to	50	24	15	31	14
Min.	2	...	...	...	...	...	...	30	22	7.5	3.2	8.4	4.3
Acre-ft.	234	...	...	...	...	...	...	1090	2230	758	457	1210	453

Total run-off for period=6,198 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Rock Creek Near Alamosa, Colorado, for Year Ending Nov. 30, 1936

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1....	42	9.5	0	14	27	21	....
2....	43	8.7	0	14	25	23	....
3....	42	6.4	0	14	24	12	....
4....	44	4.8	0	14	23	14	....
5....	45	4.5	18	12	22	23	....
6....	45	0	34	11	25	21	....
7....	40	0	35	11	25	21	....
8....	31	0	42	11	23	20	....
9....	23	0	40	10	21	19	....
10....	21	0	30	10	19	19	....
11....	24	0	20	12	19	18	....
12....	20	0	16	12	18	18	....
13....	17	0	15	11	19	18	....
14....	37	17	0	15	10	19	18
15....	35	15	0	16	8.9	19	17
16....	35	15	0	15	8.4	19	16
17....	38	16	0	13	8.4	19	16
18....	39	18	0	14	9.5	18	16
19....	42	14	0	14	9.8	18	16
20....	44	12	0	15	9.5	19	16
21....	44	13	0	24	8.9	20	16
22....	44	11	0	23	9.2	21	15
23....	42	10	0	22	9.5	21	14
24....	41	9.5	0	20	10	20	14
25....	41	8.9	0	17	10	20	14
26....	40	11	0	17	11	20	14
27....	40	9.8	0	16	17	19	14
28....	40	9.8	0	14	22	19	14
29....	41	9.8	0	13	25	18	14
30....	42	9.5	0	14	27	19	14
31....	42	0	14	..	21	..	....
Total	727	646.3	33.9	546	370.1	639	505
Mean.	21.5	1.09	17.6	12.3	20.6	16.8	....
Max..	May 14	45	9.5	42	27	27	23
Min... Acre-ft.	to 31	8.9	0	0	8.4	18	12
						1440	1280	67	1080	734	1270	1000

Total run-off for period=6,870 acre-feet.

Discharge of Alamosa River Above Terrace Reservoir, Colo., for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	22	12	....	....	....	....	39	94	352	566	200	62
2....	22	12	....	....	....	....	45	84	400	566	169	62
3....	22	11	....	....	....	....	50	75	512	533	142	55
4....	20	11	....	....	....	....	50	67	656	500	130	55
5....	18	11	....	....	....	....	43	67	736	442	156	48
6....	18	11	....	....	....	....	37	75	874	417	169	43
7....	18	11	....	....	....	....	31	84	976	442	249	43
8....	18	11	....	....	....	....	35	105	1080	417	200	62
9....	18	12	....	....	....	....	27	116	1330	392	184	48
10....	18	12	....	....	....	....	27	156	1550	392	142	43
11....	18	12	....	....	....	....	27	202	1140	369	142	38
12....	18	12	....	....	....	....	27	202	874	392	156	38
13....	18	12	....	....	....	....	31	219	922	325	130	34
14....	18	12	....	....	....	....	46	202	1080	346	118	34
15....	18	12	....	....	....	....	75	186	1480	346	108	30
16....	18	12	....	....	....	....	94	186	1310	266	88	30
17....	16	12	....	....	....	....	84	186	1010	285	88	30
18....	16	12	....	....	....	....	75	186	1060	304	78	30
19....	16	12	....	....	....	....	75	170	1060	285	70	30
20....	14	12	....	....	....	....	94	170	1120	266	70	30
21....	14	12	....	....	....	....	94	170	1180	266	62	30
22....	14	12	....	....	....	....	116	170	1060	266	62	30
23....	14	12	....	....	....	....	116	219	1010	266	70	30
24....	12	12	....	....	....	....	105	272	1010	232	62	28
25....	12	12	....	....	....	....	94	310	860	216	55	30
26....	12	12	....	....	....	....	84	376	810	200	62	43
27....	12	12	....	....	....	....	84	400	860	200	78	43
28....	12	12	....	....	....	....	84	426	720	184	62	43
29....	12	12	....	....	....	....	94	400	640	169	70	43
30....	12	12	....	....	....	....	105	452	566	200	70	38
31....	12	....	....	....	....	....	..	426	..	200	70	....
Total	502	334	....	....	....	....	1988	6453	28238	10250	3512	1203
Mean.	16.2	11.8	....	....	....	....	66.3	208	941	331	113	40.1
Max..	22	12	....	....	....	....	116	452	1550	566	249	62
Min... Acre-ft.	12	11	....	....	....	....	27	67	352	169	55	28
	996	702	....	....	....	....	3940	12800	56010	20330	6970	2390

Total run-off for period=104,138 acre-feet.

TWENTY-EIGHTH BIENNIAL REPORT

Discharge of Alamosa River Above Terrace Reservoir, Colo., for Year Ending Sept. 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	24	.	.	.	.	20	374	382	81	60	105
2	30	24	.	.	.	.	20	513	318	72	54	88
3	30	24	.	.	.	.	20	610	265	65	72	121
4	30	22	.	.	.	.	21	747	257	62	77	114
5	28	24	.	.	.	.	24	840	249	57	261	92
6	28	26	.	.	.	.	26	672	273	57	190	82
7	28	26	.	.	.	.	24	432	289	55	164	73
8	28	24	.	.	.	.	28	342	297	60	150	68
9	26	24	.	.	.	.	33	274	297	63	136	63
10	28	24	.	.	.	.	40	242	297	72	119	60
11	26	22	.	.	.	.	68	246	289	109	117	70
12	26	22	.	.	.	.	114	317	281	86	134	66
13	26	24	.	.	.	.	166	392	249	65	96	57
14	26	24	.	.	.	.	178	412	233	57	92	50
15	26	24	.	.	.	.	191	450	229	50	88	46
16	26	24	.	.	.	.	232	662	222	48	84	40
17	26	26	.	.	.	.	270	704	197	50	81	38
18	24	24	.	.	.	.	274	654	177	44	94	37
19	24	22	.	.	.	.	232	630	161	49	84	38
20	26	22	.	.	.	.	263	638	144	49	129	36
21	26	20	.	.	.	.	329	598	131	44	153	34
22	26	20	.	.	.	.	412	552	126	46	126	40
23	24	20	.	.	.	.	477	533	134	38	96	40
24	24	20	.	.	.	.	454	530	131	34	81	33
25	26	20	.	.	.	.	500	482	117	31	70	33
26	26	20	.	.	.	.	500	422	107	30	72	33
27	24	20	.	.	.	.	500	428	101	40	60	37
28	26	20	.	.	.	.	500	450	96	65	66	42
29	28	20	.	.	.	.	454	444	96	70	92	38
30	26	20	.	.	.	.	329	439	92	70	144	44
31	24	.	.	.	.	.	422	.	55	107	.	.
Total	822	676	.	.	.	.	6699	15456	6237	1774	3349	1718
Mean.	26.5	22.5	.	.	.	.	223	499	208	57.2	108	57.3
Max..	30	26	.	.	.	.	500	840	382	109	261	121
Min...	24	20	.	.	.	.	20	242	92	30	54	33
Acre-ft.	1630	1340	.	.	.	.	13290	30660	12370	3520	6640	3410

Total run-off for period = 72,860 acre-feet.

Discharge of Alamosa River Below Terrace Reservoir, Colo., for Year Ending Sept. 30, 1935												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	12	6	7	8	9	22	93	382	455	281	95
2	25	12	6	7	8	9	27	93	379	459	278	101
3	25	12	6	7	8	9	40	93	379	459	274	107
4	25	12	6	7	8	9	51	89	382	463	249	107
5	23	12	6	7	8	10	52	75	393	426	233	107
6	22	12	6	7	8	10	53	75	418	397	230	97
7	21	12	6	7	8	10	36	77	440	397	227	85
8	21	12	6	7	8	11	26	77	459	397	236	85
9	21	12	6	7	8	11	25	107	494	397	239	73
10	21	12	6	7	9	11	25	121	531	397	242	52
11	21	12	6	7	9	12	26	186	611	397	236	49
12	21	12	6	7	9	12	30	215	642	379	236	49
13	21	12	6	7	9	12	34	236	659	351	236	49
14	21	12	6	7	9	15	53	236	672	334	236	49
15	21	12	6	7	9	25	78	236	681	314	212	49
16	20	12	6	7	9	25	101	230	699	310	206	49
17	20	11	6	7	9	25	118	227	708	310	200	49
18	18	11	6	7	9	22	116	198	718	307	170	49
19	18	11	6	7	9	22	114	186	722	307	138	49
20	18	6	6	7	9	22	116	195	736	307	138	49
21	16	6	6	8	9	22	116	195	750	314	146	49
22	16	6	6	8	9	22	114	195	777	307	151	49
23	14	6	6	8	9	22	123	195	857	278	148	46
24	12	6	6	8	9	22	125	215	1180	278	159	38
25	12	6	6	8	9	22	125	262	1020	278	138	36
26	12	6	6	8	9	22	125	290	866	274	148	36
27	12	6	6	8	9	22	107	317	750	246	151	36
28	11	6	6	8	9	22	93	337	750	230	151	36
29	11	6	6	8	.	22	93	372	777	227	135	36
30	11	6	6	8	.	22	93	386	490	227	130	36
31	11	6	6	8	.	22	93	393	252	101	.	.
Total	566	291	186	228	243	533	2257	6202	19322	10474	6055	1797
Mean.	18.3	9.70	6	7.35	8.68	17.2	75.2	200	644	338	195	59.9
Max..	25	12	6	8	9	25	125	393	1180	463	281	107
Min...	11	6	6	7	8	9	22	75	379	297	101	36
Acre-ft.	1120	577	369	452	482	1060	4480	12300	38320	20770	12010	3560

Total run-off for water year 1934-35 = 95,500 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of Alamosa River Below Terrace Reservoir, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1...	36	37	36	34	33	32	31	404	403	162	80	130
2...	36	37	36	34	33	32	31	368	392	156	51	109
3...	36	36	35	34	33	32	32	368	332	144	88	111
4...	36	36	35	34	33	32	32	448	321	78	92	116
5...	36	36	35	34	33	32	34	498	253	56	66	130
6...	37	36	35	34	33	32	34	494	218	102	61	133
7...	37	36	35	34	33	32	36	490	218	102	53	133
8...	37	36	35	34	33	31	38	361	249	97	51	133
9...	37	36	35	34	33	31	36	287	292	171	51	124
10...	37	36	35	34	33	31	35	249	267	171	62	104
11...	37	36	35	34	33	31	35	211	285	133	72	101
12...	37	36	35	34	33	31	60	208	285	99	104	99
13...	37	36	35	34	32	31	125	235	282	171	133	90
14...	37	36	35	34	32	31	184	307	218	165	177	90
15...	37	36	35	34	32	31	206	339	235	144	191	78
16...	37	36	35	34	32	31	224	377	232	124	191	66
17...	37	36	35	34	32	31	271	403	225	119	184	66
18...	37	36	35	34	32	31	294	442	194	80	181	66
19...	37	36	35	34	32	31	294	462	198	51	171	56
20...	37	36	35	33	32	31	297	462	211	88	147	46
21...	37	36	35	33	32	31	294	426	144	94	90	41
22...	37	36	35	33	32	31	294	411	177	102	76	37
23...	37	36	35	33	32	31	331	415	181	106	70	37
24...	37	36	35	33	32	31	379	422	162	108	70	37
25...	37	36	35	33	32	31	393	442	171	108	90	35
26...	37	36	35	33	32	31	397	438	174	66	138	33
27...	37	36	34	33	32	31	429	346	127	116	147	33
28...	37	36	34	33	32	31	467	380	109	97	162	33
29...	37	36	34	33	32	31	467	415	156	72	165	33
30...	37	36	34	33	32	31	463	442	159	39	159	33
31...	37	36	34	33	32	31	407	...	90	150	...	...
Total	1142	1082	1082	1042	940	968	6243	11957	6870	3411	3523	2333
Mean.	36.8	36.1	34.9	33.6	32.4	31.2	208	386	229	110	114	77.8
Max...	37	37	36	34	33	32	467	498	403	171	191	133
Min...	36	36	34	33	32	31	208	109	39	51	51	33
Acre-ft.	2270	2150	2150	2070	1860	1920	12380	23720	13630	6760	6990	4630

Total run-off for water year 1935-36=80,530 acre-feet.

Discharge of Alamosa River Near Capulin, Colorado, for Year Ending Nov. 30, 1936

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1...	128	3.6	2.0	5.0	5.5	6.6
2...	128	3.0	0.6	10	5.8	2.4
3...	106	3.2	0.7	5.8	6.6	2.5
4...	95	1.8	2.8	2.6	6.8	2.5
5...	49	1.8	28	4.6	6.0	5.3
6...	38	1.8	38	4.2	8.7	3.0
7...	33	5.3	58	3.8	7.9	6.0
8...	39	12	22	2.6	2.8	7.9
9...	88	18	14	2.2	3.4	6.6
10...	108	15	8.7	.9	5.3	5.8
11...	108	27	7.6	.9	7.3	5.8
12...	108	27	7.1	1.4	6.6	4.8
13...	101	9.0	6.8	2.8	3.2	5.0
14...	79	9.0	8.4	4.4	7.9	3.0
15...	66	11	12	4.8	6.6	2.2
16...	51	8.7	8.7	1.4	1.4	.9
17...	36	8.2	7.3	.7	.7	.8
18...	17	2.6	3.8	2.2	3.0	1.8
19...	14	2.2	1.6	3.2	.8	3.0
20...	195	28	2.6	7.9	5.5	1.5
21...	182	46	.6	1.8	7.9	0
22...	162	36	0	8.4	6.8	0
23...	159	14	0	6.8	1.0	0
24...	162	7.9	0	14	5.0	2.0
25...	162	7.9	0	8.7	5.5	1.3
26...	160	6.0	0	13	5.8	2.0
27...	111	4.8	0	8.7	8.4	3.0
28...	138	4.8	1.0	4.4	8.2	2.5
29...	155	3.4	1.0	3.4	8.2	.5
30...	155	3.6	1.0	3.4	7.6	2.8
31...	128	2.2	3.2	4.8	4.8	...
Total	1869	1554.4	178.6	333.0	118.3	169.1
Mean.	May 20	51.8	5.76	10.8	3.94	5.45
Max...	10	128	27	58	10	7.9
Min...	31	3.4	0	0.6	0.9	.7
Acre-ft.	3710	3080	354	660	234	335

Total run-off for period=8,560 acre-feet.

TWENTY-EIGHTH BIENNIAL REPORT

Discharge of La Jara Creek Near Capulin, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	3	4	6	.	.	.	9	46	74	2	5	12
2.	3	4	4	.	.	.	9	40	74	2	4	9
3.	3	4	4	.	.	.	9	31	74	3	4	8
4.	3	4	4	.	.	.	9	27	66	3	4	6
5.	3	4	4	.	.	.	9	46	58	2	4	5
6.	3	4	4	.	.	.	9	58	52	2	3	5
7.	4	4	4	.	.	.	9	82	40	3	3	8
8.	4	4	4	.	.	.	9	91	31	4	3	5
9.	4	4	4	.	.	.	9	66	31	5	3	5
10.	5	4	4	.	.	.	8	66	23	4	3	5
11.	5	4	4	.	.	.	8	82	23	4	3	5
12.	6	4	4	.	.	.	8	82	20	4	3	5
13.	6	4	4	.	.	.	14	91	17	4	2	5
14.	6	4	4	.	.	.	27	101	17	5	2	5
15.	6	4	4	.	.	.	35	74	17	6	2	5
16.	6	4	4	.	.	.	30	74	14	5	3	4
17.	4	4	4	.	.	.	30	82	12	4	4	3
18.	4	4	4	.	.	.	30	91	9	4	4	3
19.	4	4	4	.	.	.	27	91	9	5	3	3
20.	4	4	4	.	.	.	52	82	9	5	3	3
21.	4	4	4	.	.	.	40	74	8	8	3	3
22.	4	4	4	.	.	.	46	66	8	8	5	3
23.	4	4	4	.	.	.	46	52	6	5	8	4
24.	4	4	4	.	.	.	46	46	5	5	6	4
25.	4	4	4	.	.	.	46	58	2	4	6	5
26.	4	4	4	.	.	.	40	66	2	3	5	6
27.	4	4	4	.	.	.	40	66	2	3	5	6
28.	4	4	4	.	.	.	40	66	2	4	5	5
29.	4	4	4	.	.	.	46	66	2	4	8	5
30.	4	4	4	.	.	.	52	91	3	4	8	5
31.	4	4	4	.	.	.	91	91	5	8	8	5
Total	130	120	126	.	.	.	792	2145	710	129	132	156
Mean.	4.19	4.00	4.06	.	.	.	26.4	69.2	23.7	4.16	4.26	5.20
Max..	6	4	6	.	.	.	52	101	74	8	8	12
Min...	3	4	4	.	.	.	8	27	2	2	2	3
Acre-ft.	258	238	250	.	.	.	1570	4250	1410	256	262	309

Total run-off for period = 8,803 acre-feet.

Discharge of La Jara Creek Near Capulin, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	5	5	.	.	.	.	.	.	.	.	.	.
2.	5	5	.	.	.	.	.	.	.	.	.	.
3.	5	.	.	.	.	.	.	.	.	.	.	.
4.	5	.	.	.	.	.	.	.	.	.	.	.
5.	5	.	.	.	.	.	.	.	.	.	.	.
6.	5	.	.	.	.	.	.	.	.	.	.	.
7.	5	.	.	.	.	.	.	.	.	.	.	.
8.	5	.	.	.	.	.	.	.	.	.	.	.
9.	5	.	.	.	.	.	.	.	.	.	.	.
10.	5	.	.	.	.	.	.	.	.	.	.	.
11.	5	.	.	.	.	.	.	.	.	.	.	.
12.	6	.	.	.	.	.	.	.	.	.	.	.
13.	6	.	.	.	.	.	.	.	.	.	.	.
14.	6	.	.	.	.	.	.	.	.	.	.	.
15.	6	.	.	.	.	.	.	.	.	.	.	.
16.	6	.	.	.	.	.	.	.	.	.	.	.
17.	6	.	.	.	.	.	.	.	.	.	.	.
18.	8	.	.	.	.	.	.	.	.	.	.	.
19.	8	.	.	.	.	.	.	.	.	.	.	.
20.	12	.	.	.	.	.	.	.	.	.	.	.
21.	9	.	.	.	.	.	.	.	.	.	.	.
22.	9	.	.	.	.	.	.	.	.	.	.	.
23.	6	.	.	.	.	.	.	.	.	.	.	.
24.	8	.	.	.	.	.	.	.	.	.	.	.
25.	8	.	.	.	.	.	.	.	.	.	.	.
26.	12	.	.	.	.	.	.	.	.	.	.	.
27.	9	.	.	.	.	.	.	.	.	.	.	.
28.	8	.	.	.	.	.	.	.	.	.	.	.
29.	7	.	.	.	.	.	.	.	.	.	.	.
30.	5	.	.	.	.	.	.	.	.	.	.	.
31.	5	.	.	.	.	.	.	.	.	.	.	.
Total	205	.	.	.	.	.	.	.	.	.	.	.
Mean.	6.6	.	.	.	.	.	.	.	.	.	.	.
Max..	12	.	.	.	.	.	.	.	.	.	.	.
Min...	5	.	.	.	.	.	.	.	.	.	.	.
Acre-ft.	407	.	.	.	.	.	.	.	.	.	.	.

At old location. Station moved upstream April, 1936.

Unless otherwise noted, all discharges are in cubic feet per second.

**Discharge of La Jara Creek at Gallegos Ranch Near Capulin, Colorado, for Year
Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	12	9.4	14	9.1
2	30	11	9.7	11	9.1
3	33	11	9.1	13	9.1
4	31	11	9.1	15	8.8
5	30	11	8.8	22	7.8
6	28	10	16	14	7.4
7	28	9.7	32	11	7.2
8	32	8.8	38	12	7.4
9	35	7.8	37	9.7	7.2
10	33	8.1	40	8.4	6.8
11	31	8.8	41	8.8	7.4
12	32	8.4	39	8.1	7.8
13	28	8.4	37	7.8	7.6
14	24	8.1	37	11	7.4
15	23	7.8	39	9.4	7.4
16	23	7.8	40	8.1	7.2
17	21	7.8	41	11	7.8
18	20	7.6	40	8.8	8.4
19	19	7.6	40	8.4	8.4
20	18	7.6	40	30	7.8
21	16	7.8	40	13	7.6
22	15	7.8	39	9.4	10
23	15	9.4	37	8.4	11
24	13	10	42	8.1	8.4
25	14	10	43	8.1	7.8
26	15	11	42	7.6	9.7
27	14	11	42	8.1	14
28	12	10	42	8.4	14
29	11	9.7	26	9.7	11
30	11	9.7	16	15	13
31	11	11	15	11	.
Total								696	276.7	987.1	348.3	263.9
Mean.								22.5	9.22	31.8	11.2	8.80
Max..								35	12	43	30	14
Min..								11	7.6	8.8	7.6	6.8
Acre-ft.								1380	549	1960	691	523

Total run-off for period=5,100 acre-feet.

**Discharge of La Jara Creek Below Empire Canal Near Sanford, Colorado, for Year
Ending Nov. 30, 1936**

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1	61	5	17	6.6	29	3.9
2	44	5	18	11	29	4.0
3	35	4	17	16	29	3.8
4	34	4	17	13	28	3.5
5	29	3	21	14	28	3.6
6	26	3	34	17	31	4.2
7	25	3	94	21	35	4.2
8	24	6	100	15	37	4.2
9	20	6	67	12	38	4.0
10	22	6	40	13	34	3.8
11	26	5	40	13	36	3.8
12	26	4	24	13	35	3.8
13	26	2	10	15	32	3.9
14	25	2	5.9	15	30	4.1
15	29	2	5.3	16	30	4.2
16	27	2	4.5	15	30	4.1
17	22	2	3.5	14	29	3.6
18	15	9	3.1	13	29	3.6
19	14	15	3.6	14	30	3.9
20	24	8	11	4.2	16	31	3.8	.
21	.	.	.	23	7	5	6.1	14	32	3.8	.	.
22	.	.	22	6	0	19	17	35	33	.	.	.
23	.	.	22	5	0	23	18	34	30	.	.	.
24	.	.	32	5	0	24	17	32	29	.	.	.
25	.	.	35	5	0	19	17	33	30	.	.	.
26	.	.	38	5	0	16	18	35	28	.	.	.
27	.	.	30	5	0	7.5	22	33	31	.	.	.
28	.	.	23	5	0	5.1	29	36	32	.	.	.
29	.	.	24	6	14	5.7	32	35	31	.	.	.
30	.	.	26	6	18	5.7	31	34	31	.	.	.
31	.	.	38	16	5.7	17	34	34	34	.	.	.
Total				337	593	154	665.9	497.6	1003	1093		
Mean.				May 20	19.8	5.0	21.5	16.6	32.4	36.4		
Max..				to	61	18	100	32	38	42		
Min..				31	5	0	3.1	6.6	28	28		
Acre-ft.				668	1180	305	1320	987	1990	2170		

Total run-off for period=8,620 acre-feet.

**Discharge of Trinchera Creek Above Turner's Ranch Near Fort Garland, Colorado,
for Year Ending Sept. 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9					8	13	16	122	64	28	15
2	9					8	11	16	122	57	28	15
3	9					8	11	13	132	57	24	15
4	9					8	11	13	142	57	24	15
5	9					8	11	13	142	50	28	15
6	9					7	11	13	152	50	24	15
7	9					7	11	13	163	50	24	12
8	9					7	11	16	163	50	24	12
9	9					7	11	16	174	44	24	12
10	9					7	9	19	174	44	24	12
11	9					7	9	19	174	38	19	12
12	9					7	9	28	163	38	24	12
13	9					7	9	28	163	38	19	12
14	9					7	11	28	174	33	19	12
15	9					7	13	28	163	33	19	12
16	9					8	13	33	152	33	19	12
17	9					8	16	38	142	33	15	12
18	9					8	16	38	122	33	15	12
19	9					8	16	38	122	33	15	12
20	8					8	16	38	113	33	18	12
21	8					9	16	38	113	33	18	12
22	8					9	16	38	113	33	18	12
23	9					9	19	50	104	33	18	12
24	8					9	19	64	96	33	15	12
25	8					9	19	88	96	33	15	12
26	9					9	16	96	88	33	15	15
27	8					9	16	96	80	28	15	18
28	8					9	16	104	80	28	15	18
29	8					9	16	104	72	28	18	15
30	8					9	16	113	64	28	15	15
31	8					9	122		28	15		
Total	269					249	407	1377	3880	1206	611	399
Mean	8.68					8.03	13.6	44.4	129	38.9	19.7	13.3
Max..	9					9	19	122	174	64	28	18
Min..	8					7	9	13	64	28	15	12
Acre-ft.	534					494	807	2730	7700	2390	1210	791

Total run-off for period=16,656 acre-feet.

**Discharge of Trinchera Creek Above Turner's Ranch, Near Fort Garland, Colorado,
for Year Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15					13	33	64	21	18	21	
2	15					19	33	64	21	18	19	
3	15					19	33	64	20	26	20	
4	15					13	35	59	18	34	20	
5	15					13	36	53	18	52	19	
6	15					13	36	48	19	52	18	
7	15					11	34	46	20	52	18	
8	15					13	22	45	21	49	18	
9	15					11	31	44	22	45	17	
10	15					9	37	44	18	43	16	
11	15					13	42	44	19	41	20	
12	15					19	40	42	20	40	18	
13	15					24	45	42	18	38	16	
14	15					24	56	41	17	36	14	
15	15					24	69	39	15	33	15	
16	15					24	80	37	17	33	15	
17	15					28	81	35	15	31	14	
18	15					28	79	33	14	28	16	
19	12					24	77	32	15	35	16	
20	12					24	76	31	16	34	14	
21	12					28	75	29	14	32	14	
22	12					28	72	27	14	29	13	
23	12					28	74	27	13	27	13	
24	12					28	74	26	13	26	12	
25	12					33	72	26	12	25	12	
26	11					33	70	24	13	24	14	
27	11					33	68	25	18	23	13	
28	11					33	66	24	20	24	15	
29	11					33	65	24	18	26	15	
30	11					33	66	23	17	26	16	
31	11					66			16	22		
Total	420					676	1743	1162	532	1022	481	
Mean	13.5					22.5	56.2	38.7	17.2	33.0	16.0	
Max..	15					33	81	64	22	52	21	
Min..	11					9	22	23	12	18	12	
Acre-ft.	833					1340	3460	2300	1060	2030	954	

Total run-off for period=11,977 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

**Discharge of Trinchera Creek Above Mountain Home Reservoir Near Fort Garland,
Colorado, for Year Ending Sept. 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	....	....	....	....	....	1	13	89	46	25	14
2	10	....	....	....	....	....	1	12	86	44	25	14
3	10	....	....	....	....	....	3	12	92	41	25	14
4	10	....	....	....	....	....	3	12	102	38	24	14
5	10	....	....	....	....	....	4	10	110	36	26	12
6	10	....	....	....	....	....	4	11	122	36	24	12
7	10	....	....	....	....	....	3	11	117	36	24	12
8	10	....	....	....	....	....	4	12	125	35	22	13
9	10	....	....	....	....	....	5	12	118	35	22	12
10	10	....	....	....	....	....	5	14	111	32	22	12
11	10	....	....	....	....	....	2	16	106	31	21	12
12	10	....	....	....	....	....	1	20	99	34	23	11
13	10	....	....	....	....	....	1	20	98	41	20	10
14	10	....	....	....	....	....	1	21	106	33	19	10
15	10	....	....	....	....	....	2	19	112	32	17	10
16	10	....	....	....	....	....	8	14	125	31	16	10
17	11	....	....	....	....	....	12	19	114	30	17	9
18	10	....	....	....	....	....	11	21	106	32	16	10
19	10	....	....	....	....	....	10	22	105	29	15	9
20	11	....	....	....	....	....	10	23	99	32	15	10
21	11	....	....	....	....	....	10	21	94	38	19	10
22	10	....	....	....	....	....	12	21	93	32	16	10
23	5	....	....	....	....	....	12	24	83	31	17	10
24	4	....	....	....	....	....	14	35	62	26	18	10
25	2	....	....	....	....	....	14	44	68	24	16	12
26	1	....	....	....	....	....	12	54	66	24	16	16
27	1	....	....	....	....	....	3	12	63	24	16	21
28	1	....	....	....	....	....	3	12	67	59	23	16
29	1	....	....	....	....	....	2	12	74	56	21	16
30	1	....	....	....	....	....	2	13	78	51	22	14
31	1	....	....	....	....	....	1	....	89	....	26	16
Total	240	....	....	....	....	....	11	214	884	2837	995	598
Mean	7.74	....	....	....	....	....	Mar 27	7.13	28.5	94.6	32.1	19.3
Max..	11	....	....	....	....	....	to	14	89	125	46	26
Min..	1	....	....	....	....	....	31	1	10	51	21	14
Acre-ft.	476	....	....	....	....	....	22	424	1750	5630	1970	1190
												730

Total run-off for period=12,192 acre-feet.

**Discharge of Trinchera Creek Above Mountain Home Reservoir Near Fort Garland,
Colorado, for Year Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	12	....	....	....	....	5.1	16	59	14	13	16
2	15	13	....	....	....	....	5.4	15	56	13	15	16
3	15	12	....	....	....	....	7.7	13	56	12	16	18
4	14	12	....	....	....	....	8.9	15	53	12	27	18
5	14	8	....	....	....	....	8.9	16	50	12	48	16
6	14	8	....	....	....	....	8.5	16	40	13	46	16
7	14	....	....	....	....	....	8.5	16	24	16	50	16
8	14	....	....	....	....	....	10	16	24	16	47	15
9	15	....	....	....	....	....	11	18	23	16	44	15
10	14	....	....	....	....	....	10	20	20	17	40	15
11	14	....	....	....	....	....	11	18	23	18	41	16
12	14	....	....	....	....	....	16	17	24	20	39	16
13	14	....	....	....	....	....	18	16	21	16	35	15
14	14	....	....	....	....	....	20	20	20	16	32	13
15	16	....	....	....	....	....	20	33	22	16	31	12
16	14	....	....	....	....	....	21	52	31	16	28	13
17	14	....	....	....	....	....	21	63	26	15	26	13
18	13	....	....	....	....	....	22	61	21	15	25	13
19	14	....	....	....	....	....	21	56	16	14	26	14
20	14	....	....	....	....	....	20	56	14	13	30	12
21	14	....	....	....	....	....	23	54	12	10	29	10
22	14	....	....	....	....	....	24	49	11	10	25	10
23	14	....	....	....	....	....	26	49	12	8.1	19	12
24	14	....	....	....	....	....	24	49	13	8.1	17	12
25	13	....	....	....	....	....	22	48	14	8.1	17	12
26	14	....	....	....	....	....	21	46	14	6.9	18	12
27	13	....	....	....	....	....	21	47	14	8.1	18	13
28	12	....	....	....	....	....	21	57	15	16	18	13
29	12	....	....	....	....	....	21	62	14	14	19	14
30	14	....	....	....	....	....	16	63	14	14	20	15
31	12	....	....	....	....	....	63	....	13	16	....	....
Total	432	65	....	....	....	....	493.0	1140	756	416.3	875	421
Mean	13.9	Nov. 1	....	....	....	....	16.4	36.8	25.2	13.4	28.2	14.0
Max..	16	to	....	....	....	....	26	63	59	20	50	18
Min..	12	6	....	....	....	....	5.1	13	11	6.9	13	10
Acre-ft.	857	129	....	....	....	....	978	2260	1500	826	1740	835

Total run-off for period=9,125 acre-feet.

**Discharge of Trinchera Creek Below Smith Reservoir Near Blanca, Colorado, for Year
Ending Sept. 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1	1	1	0.5	0.5	0.5	0.6	6	10	10	11	10
2	1	1	1	0.5	0.5	0.5	0.6	6	10	11	11	4
3	1	1	1	0.5	0.5	0.5	0.6	5	14	11	11	2
4	1	1	1	0.5	0.5	0.5	0.6	6	18	10	11	2
5	1	1	1	0.5	0.5	0.5	0.6	5	21	10	11	2
6	1	1	1	0.5	0.5	0.5	0.6	5	27	10	10	2
7	1	1	1	0.5	0.5	0.5	0.6	5	27	10	10	2
8	1	1	1	0.5	0.5	0.5	0.6	6	31	9	12	2
9	1	1	1	0.5	0.5	0.5	0.6	5	31	5	12	1
10	1	1	1	0.5	0.5	0.5	0.6	5	34	3	12	1
11	1	1	1	0.5	0.5	0.5	0.6	7	35	3	11	2
12	1	1	1	0.5	0.5	0.5	0.6	7	38	3	11	2
13	1	1	1	0.5	0.5	0.5	0.6	8	42	3	11	2
14	1	1	1	0.5	0.5	0.5	0.6	8	53	2	11	1
15	1	1	1	0.5	0.5	0.5	1	9	61	2	11	2
16	1	1	1	0.5	0.5	0.5	5	8	62	2	11	2
17	1	1	1	0.5	0.5	0.5	5	8	57	2	11	2
18	1	1	1	0.5	0.5	0.5	5	9	43	2	11	2
19	1	1	1	0.5	0.5	0.5	5	9	30	1	10	2
20	1	1	1	0.5	0.5	0.5	6	7	24	2	11	2
21	1	1	1	0.5	0.5	0.6	5	8	18	2	11	2
22	1	1	1	0.5	0.5	0.6	5	9	13	1	10	2
23	1	1	1	0.5	0.5	0.6	5	10	12	1	10	2
24	1	1	1	0.5	0.5	0.6	5	10	10	1	11	2
25	1	1	1	0.5	0.5	0.6	5	11	10	1	10	2
26	1	1	1	0.5	0.5	0.6	5	10	11	1	10	1
27	1	1	1	0.5	0.5	0.6	6	10	11	2	10	2
28	1	1	1	0.5	0.5	0.6	6	10	11	10	10	1
29	1	1	1	0.5	...	0.6	5	11	11	10	10	1
30	1	1	1	0.5	...	0.6	6	10	11	10	11	1
31	1	1	1	0.5	...	0.6	...	10	...	11	11	...
Total	31	30	31	15.5	14.0	16.6	88.4	243	786	161	334	64
Mean	1	1	1	0.5	0.5	0.54	2.95	7.84	26.2	5.19	10.8	2.13
Max.	1	1	1	0.5	0.5	0.6	6	11	62	11	12	10
Min.	1	1	1	0.5	0.5	0.5	0.6	5	10	1	10	1
Acre-ft.	61	60	61	31	28	33	175	482	1560	319	662	127

Total run-off for water year 1934-35 = 3,599 acre-feet.

Discharge of Trinchera Creek Below Smith Reservoir Near Blanca, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1	1	1	1.8	7.0	13	3.8	1.0	7.8	9.5	61	
2	1	1	1	1.8	8.4	11	2.8	1.0	8.1	9.2	59	
3	1	1	1	1.8	8.9	9.5	2.0	1.0	7.6	10	50	
4	1	1	1	1.8	10	7.6	1.4	1.0	7.3	8.1	42	
5	1	1	1	1.8	10	13	1.3	1.0	6.7	6.7	38	
6	1	1	1	1.8	11	3.8	1.4	1.0	6.5	6.5	30	
7	1	1	1	1.8	13	5.8	2.6	1.8	6.5	5.5	23	
8	1	1	1	1.8	13	5.5	.9	13	6.5	5.5	16	
9	1	1	1	1.8	12	5.8	1.4	16	6.5	4.9	13	
10	1	1	1	1.8	12	5.8	3.8	14	6.2	5.1	9.5	
11	1	1	1	1.8	11	5.5	7.6	13	7.0	7.6	6.7	
12	1	1	1	1.8	11	5.3	9.5	12	7.0	14	5.5	
13	2	1	1	1.8	10	6.5	9.2	10	6.7	19	3.7	
14	2	1	1	1.8	9.5	9.5	9.5	11	4.2	20	2.5	
15	2	1	1	1.8	8.4	13	11	11	1.1	22	1.6	
16	2	1	1	1.8	7.3	15	18	10	1.1	18	1.3	
17	2	1	1	1.8	6.5	14	29	11	1.0	13	1.1	
18	2	1	1	1.8	5.8	15	36	11	1.0	12	.9	
19	2	1	1	1.8	5.3	14	33	11	.9	15	1.0	
20	2	1	1	1.8	4.4	16	30	8.6	.8	13	.8	
21	2	1	1	1.9	4.0	14	24	8.4	.8	26	.8	
22	2	1	1	2.5	4.4	14	16	7.8	.8	39	.9	
23	2	1	1	2.5	5.8	13	14	8.1	.8	38	1.0	
24	2	1	1	3.2	6.7	12	10	8.6	.8	31	.8	
25	2	1	1	4.0	7.0	12	6.7	8.4	.8	24	.8	
26	2	1	1	4.7	8.6	15	3.5	8.4	.8	20	1.0	
27	2	1	1	4.9	9.2	17	1.8	8.4	.8	13	1.1	
28	2	1	1	5.3	11	16	1.1	8.4	1.8	10	1.1	
29	2	1	1	6.2	12	11	1.0	8.1	11	6.5	1.3	
30	2	1	1	14	5.8	1.1	8.1	9.8	7.0	1.5		
31	2	1	1	13	1.0	1.0	9.8	22				
Total	50	60	62	58.9	71.2	280.2	324.4	294.4	242.1	138.5	461.1	376.9
Mean	1.6	2	2	1.9	2.46	9.04	10.8	9.50	8.07	4.47	14.9	12.6
Max.	2	...	...	...	6.2	14	17	36	16	11	39	61
Min.	1	119	123	117	141	556	643	584	480	275	915	748

Total run-off for water year 1935-36 = 4,800 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of Trinchera Creek at Mouth Near La Sauses, Colorado, for Year
Ending Nov. 30, 1936

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1	4.0	0.4	0.2	0.2	13	8.7	36
2	3.0	.3	.2	.2	24	6.6	38
3	2.0	.2	.2	.2	26	5.8	36
4	2.0	.2	.2	.3	25	7.8	35
5	2.0	.2	.2	.4	23	11	35
6	1.4	.2	.2	.3	21	15	37
7	1.4	.2	.2	.7	19	14	38
8	1.4	.2	.2	.4	16	8.3	40
9	1.4	.2	.2	.3	16	5.7	39
10	1.6	.2	.2	.4	13	4.2	38
11	1.7	.2	.2	.3	12	4.6	37
12	2.2	.2	.3	.4	10	5.4	36
13	2.7	.1	.3	.3	8.3	11	38
14	2.7	.1	.2	.3	6.8	13	37
15	2.2	.1	.2	.4	6.6	18	37
16	1.3	.1	.2	.3	4.9	22	28
17	1.3	.1	.2	.6	3.8	14	38
18	3.0	.1	.1	.9	4.5	15	38
19	8.3	.1	.1	1.4	4.2	17	37
20	9.7	.2	.1	12	3.7	20	37
21	8.9	.3	.1	15	3.2	24	34
22	7.0	.4	.1	16	3.4	28	31
23	5.5	.4	.1	20	3.4	31	28
24	2.6	.3	.1	23	3.2	34	25
25	1.9	.3	.1	24	3.2	34	21
26	1.3	.3	.1	21	3.0	37	24
27	1.2	.3	.1	18	.7	35	26
28	1.0	.3	.1	16	3.3	36	25
29	1.0	.3	.1	16	1.6	37	24
307	.3	.1	12	1.2	37	24
316	.2	.1	10	.36	36	8
Total						87.0	6.8	5.1	211.3	312.2	596.1	1006
Mean.						2.81	0.23	0.16	6.82	10.4	19.2	33.5
Max..						9.7	0.4	0.3	24	26	37	40
Min..						0.6	0.1	0.1	0.2	0.7	4.2	21
Acre-ft.						173	14	10	419	619	1180	2000

Total run-off for period=4,415 acre-feet.

Discharge of Sangre De Cristo Creek Near Fort Garland, Colorado, for Year
Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	.	.	.	.	.	5	31	104	12	4	10
2	0	.	.	.	.	.	7	28	97	12	5	11
3	0	.	.	.	.	.	9	27	88	12	7	11
4	0	.	.	.	.	.	10	25	82	10	22	11
5	0	.	.	.	.	.	12	26	78	8	40	10
6	0	.	.	.	.	.	10	34	73	8	24	9
7	0	.	.	.	.	.	8	39	69	8	18	8
8	0	.	.	.	.	.	9	39	63	8	12	7
9	0	.	.	.	.	.	11	39	54	8	14	7
10	0	.	.	.	.	.	8	38	51	8	14	7
11	0	.	.	.	.	.	8	38	50	8	11	6
12	0	.	.	.	.	.	8	39	58	8	11	4
13	0	.	.	.	.	.	8	39	54	8	10	3
14	0	.	.	.	.	.	9	43	47	8	8	3
15	0	.	.	.	.	.	10	39	45	8	7	1
16	0	.	.	.	.	.	13	39	37	8	4	0
17	0	.	.	.	.	.	15	74	34	8	4	0
18	0	.	.	.	.	.	15	106	33	9	4	0
19	0	.	.	.	.	.	12	114	33	8	3	0
20	0	.	.	.	.	.	22	114	31	10	2	0
21	0	.	.	.	.	.	22	104	29	39	3	0
22	0	.	.	.	.	.	25	113	30	39	3	0
23	1	.	.	.	.	.	26	128	29	14	2	0
24	1	.	.	.	.	.	29	156	22	9	1	0
25	1	.	.	.	.	.	27	172	21	7	1	0
26	1	.	.	.	.	.	25	170	19	6	8	0
27	1	.	.	.	.	.	22	156	16	7	16	0
28	1	.	.	.	.	.	22	144	16	4	32	0
29	1	.	.	.	.	.	23	133	16	4	14	8
30	1	.	.	.	.	.	29	119	14	4	12	6
31	1	.	.	.	.	.	.	110	3	12	.	.
Total	9	.	.	.	.	.	459	2476	1393	313	328	122
Mean.	0.29	.	.	.	.	.	15.3	79.9	46.4	10.1	10.6	4.07
Max..	1	.	.	.	.	.	29	172	104	39	40	11
Min..	0	.	.	.	.	.	5	25	14	3	1	0
Acre-ft.	18	.	.	.	.	.	910	4910	2760	621	651	242

Total run-off for period=10,112 acre-feet.

Discharge of Sangre De Cristo Creek Near Fort Garland, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16							9	27	2.5	7.2	31
2	14							9	23	2.2	9.0	18
3	14							9	23	2.0	5.6	15
4	14							10	21	1.6	3.0	14
5	12							9.5	19	.9	8.3	12
6	12							9.5	17	.7	6.0	9.5
7	11							9.5	15	1.5	6.1	6.6
8	11							13	13	8.5	4.8	5.7
9	11							18	11	9.0	3.7	5.2
10	11							28	12	24	2.9	4.3
11	10							26	16	11	2.7	4.8
12	10							35	16	7.7	2.0	6.6
13	9							41	13	5.9	1.6	5.2
14	8							44	10	3.9	1.6	3.2
15	7							54	8.0	2.8	2.1	2.4
16	9							60	7.1	2.1	1.5	2.4
17	10							58	6.0	1.7	1.2	2.2
18	11							56	4.9	1.4	1.0	6.2
19	11							51	4.1	2.8	1.4	5.7
20	12							49	3.8	5.0	1.5	5.7
21	12							48	3.6	2.4	1.7	3.9
22	12							49	3.3	1.4	1.4	3.4
23	10							50	3.6	0	11	3.2
24	10							47	4.6	0	9.0	2.4
25	10							44	3.5	0	7.7	2.4
26	10							42	3.2	0	5.9	2.9
27	10							39	3.0	0	4.6	6.2
28	10							35	3.6	53	5.0	9.0
29	10							31	3.8	22	6.4	11
30	10							30	2.8	12	20	13
31	10							32	..	10	139	..
Total	337							1045.5	304.9	198.0	\$25.8	223.1
Mean	10.9							33.7	10.2	6.39	26.6	7.44
Max.	16							60	27	53	139	31
Min.	7							9	2.8	0	4.6	2.2
Acre-ft.	668							2070	605	393	1640	443

Total run-off for period = 5,819 acre-feet.

Discharge of Sangre De Cristo Creek Above Smith Reservoir, Near Blanca, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.2	9.2	14	10	17	81
2	4.8	9.2	11	8.8	10	47
3	3.4	8.8	11	6.8	39	44
4	3.6	8.4	10	9.6	40	48
5	3.4	14	9.2	8.4	246	43
6	3.2	12	8.4	4.8	237	30
7	3.0	12	7.6	4.4	206	24
8	3.0	35	8.0	3.8	148	20
9	2.8	63	6.8	2.8	114	15
10	3.0	55	6.2	5.4	91	12
11	2.6	55	8.4	7.6	72	18
12	5.4	47	8.0	6.2	57	22
13	14	40	8.0	5.9	44	16
14	17	53	7.3	5.6	37	11
15	15	67	5.9	6.8	33	7.0
16	13	85	5.9	6.8	29	7.8
17	13	113	5.6	6.2	18	7.8
18	15	94	7.0	5.4	15	7.4
19	12	74	6.2	4.6	17	10
20	11	57	7.3	4.0	25	7.0
21	16	46	7.6	3.8	78	6.5
22	14	35	7.3	3.2	56	6.5
23	9.2	27	8.4	3.0	41	6.8
24	10	22	17	2.6	31	7.0
25	12	20	12	2.3	23	7.0
26	28	16	11	2.5	18	7.0
27	20	13	11	3.8	13	15
28	8.8	12	10	132	12	24
29	7.6	11	10	92	17	27
30	7.6	12	10	35	42	33
31	29	..	28	159	..
Total	285.6	1154.6	266.1	432.1	1985	617.8
Mean	9.52	37.2	8.87	13.9	64.0	20.6
Max.	28	113	17	132	246	81
Min.	26	8.4	5.6	2.3	10	6.5
Acre-ft.	566	2290	528	857	3940	1230

Total run-off for period = 9,411 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Ute Creek at Upper Sta. Near Fort Garland, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	57	28	.....	.....
2	51	25	.....	.....
3	44	23	.....	.....
4	84	42	21	.....	.....
5	77	40	20	.....	.....
6	66	42	18	.....	.....
7	54	43	19	.....	.....
8	46	44	19	.....	.....
9	49	45	19	.....	.....
10	44	45	20	.....	.....
11	46	46	22	.....	.....
12	50	46	24	.....	.....
13	56	45	18	.....	.....
14	61	42	16	.....	.....
15	73	42	16	.....	.....
16	83	47	18	.....	.....
17	82	39	20	.....	.....
18	76	35	18	.....	.....
19	76	33	22	.....	.....
20	73	32	30	.....	.....
21	73	30	20	.....	.....
22	69	30	18	.....	.....
23	69	46	16	.....	.....
24	70	48	14	.....	.....
25	69	37	13	.....	.....
26	65	34	13	.....	.....
27	68	32	49	.....	.....
28	69	38	Gage	.....	.....
29	73	38	Washed	.....	.....
30	78	33	Out	.....	.....
31	66	.....	.....	.....	.....
Total	1865	1226	559	.....	.....
Mean.	May	40.9	July	.....	.....
Max.	4 to	57	1 to	.....	.....
Min.	31	30	27	.....	.....
Acre-ft.	3700	2430	1110	.....	.....

Total run-off for period=7,240 acre-feet.

Discharge of Ute Creek Near Fort Garland, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	.....	.....	.....	.....	.....	9	11	51	54	49	24
2	10	.....	.....	.....	.....	.....	10	11	51	49	41	23
3	10	.....	.....	.....	.....	.....	12	12	55	54	33	23
4	9	.....	.....	.....	.....	.....	7	18	63	53	59	22
5	6	.....	.....	.....	.....	.....	9	18	73	35	77	18
6	5	.....	.....	.....	.....	.....	9	15	88	36	55	15
7	4	.....	.....	.....	.....	.....	8	14	101	40	40	15
8	4	.....	.....	.....	.....	.....	9	15	119	49	32	18
9	5	.....	.....	.....	.....	.....	10	18	139	44	38	19
10	7	.....	.....	.....	.....	.....	8	19	162	44	40	18
11	8	.....	.....	.....	.....	.....	9	20	173	40	32	16
12	8	.....	.....	.....	.....	.....	9	22	180	46	28	14
13	8	.....	.....	.....	.....	.....	10	25	204	75	25	12
14	8	.....	.....	.....	.....	.....	10	21	217	54	23	12
15	6	.....	.....	.....	.....	.....	14	19	210	58	17	12
16	7	.....	.....	.....	.....	.....	13	17	181	43	9	12
17	7	.....	.....	.....	.....	.....	12	48	121	41	9	12
18	6	.....	.....	.....	.....	.....	11	44	104	43	8	10
19	5	.....	.....	.....	.....	.....	10	39	112	36	12	9
20	5	.....	.....	.....	.....	.....	12	33	110	46	15	8
21	5	.....	.....	.....	.....	.....	12	32	114	68	18	8
22	4	.....	.....	.....	.....	.....	13	33	119	59	15	8
23	4	.....	.....	.....	.....	.....	14	31	112	80	14	8
24	6	.....	.....	.....	.....	.....	15	32	101	54	16	8
25	4	.....	.....	.....	.....	.....	14	35	86	41	15	10
26	4	.....	.....	.....	.....	.....	12	33	80	38	16	13
27	4	.....	.....	.....	.....	.....	7	11	43	68	24	23
28	4	.....	.....	.....	.....	.....	7	10	45	64	32	21
29	4	.....	.....	.....	.....	.....	8	10	46	69	29	22
30	4	.....	.....	.....	.....	.....	10	11	48	61	31	19
31	4	.....	.....	.....	.....	.....	11	.....	53	29	25	19
Total	186	.....	.....	.....	.....	.....	43	323	880	3388	1437	897
Mean.	6.00	.....	.....	.....	.....	.....	Mar.	10.8	28.4	113	46.4	28.9
Max.	11	.....	.....	.....	.....	.....	27 to	15	53	217	80	77
Min.	4	.....	.....	.....	.....	.....	31	7	11	51	29	8
Acre-ft.	369	.....	.....	.....	.....	.....	85	641	1750	6720	2850	1780

Total run-off for period=15,092 acre-feet.

Discharge of Ute Creek Near Fort Garland, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	11	...	...	...	...	7.5	57	50	10	50	68
2	22	12	...	...	...	...	5.5	58	46	4.5	41	48
3	20	11	...	...	...	...	8.5	62	42	3.4	48	44
4	19	10	...	...	...	...	8.5	68	39	2.2	66	39
5	19	9	...	...	...	...	7.0	68	36	1.8	288	32
6	18	10	...	...	...	...	6.5	63	36	1.6	208	30
7	15	...	...	...	...	...	8.0	55	36	5.5	169	27
8	15	...	...	...	...	...	12	51	37	11	132	25
9	15	...	...	...	...	...	14	52	37	11	98	24
10	13	...	...	...	...	...	12	46	39	16	80	24
11	12	...	...	...	...	...	18	41	38	15	66	24
12	13	...	...	...	...	...	30	41	38	16	50	26
13	14	...	...	...	...	...	39	43	37	16	40	23
14	14	...	...	...	...	...	45	48	36	20	39	20
15	12	...	...	...	...	...	49	57	33	16	37	18
16	12	...	...	...	...	...	50	64	38	16	32	19
17	13	...	...	...	...	...	55	68	35	15	30	17
18	13	...	...	...	...	...	66	61	32	15	28	15
19	13	...	...	...	...	...	57	62	29	22	31	16
20	14	...	...	...	...	...	58	60	26	23	35	14
21	13	...	...	...	...	...	61	58	25	17	73	11
22	13	...	...	...	...	...	62	56	23	15	47	10
23	14	...	...	...	...	...	70	53	33	12	37	11
24	14	...	...	...	...	...	67	55	38	9.6	32	9.6
25	14	...	...	...	...	...	74	55	24	7.5	28	9.0
26	15	...	...	...	...	...	70	53	13	3.2	27	11
27	14	...	...	...	...	...	63	53	13	24	26	11
28	13	...	...	...	...	...	61	55	15	236	25	16
29	13	...	...	...	...	...	64	55	19	249	29	21
30	12	...	...	...	...	...	61	62	14	94	53	22
31	11	...	...	...	...	...	59	...	71	86	...	...
Total	453	63	...	...	...	...	1209.5	1739	957	979.3	2031	684.6
Mean.	14.6	Nov.	...	...	...	...	40.3	56.1	31.9	31.6	65.5	22.8
Max.	22	1 to	...	...	...	...	74	68	50	249	288	68
Min.	11	6	...	...	...	...	5.5	41	13	1.6	25	9.0
Acre-ft.	899	125	...	...	...	...	2400	3450	1900	1940	4030	1360

Total run-off for period = 16,104 acre-feet.

Discharge of Conejos River Near Mogote, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	82	43	37	26	37	44	129	324	1180	1600	439	252
2	76	48	36	24	39	44	163	306	1280	1600	476	271
3	73	39	31	24	40	47	183	295	1540	1500	385	212
4	68	44	32	25	41	36	195	266	1760	1470	336	190
5	65	44	35	27	42	39	187	255	1900	1340	412	172
6	62	45	36	28	46	36	163	301	2110	1250	419	156
7	60	48	36	27	45	41	145	337	2260	1260	392	150
8	57	48	36	23	45	40	159	428	2330	1280	366	229
9	55	48	36	27	38	33	134	513	2520	1180	419	190
10	55	48	35	29	43	50	108	625	2700	1120	366	166
11	55	48	36	26	44	45	106	748	2880	1060	330	150
12	55	48	32	31	37	49	113	814	2360	1040	432	137
13	57	48	33	26	40	55	134	739	2420	990	372	127
14	56	45	33	29	41	69	187	712	2700	874	330	118
15	54	44	33	31	43	94	283	634	3100	1080	276	112
16	51	44	32	32	37	89	343	650	3170	778	248	106
17	51	47	27	25	44	89	337	659	2490	714	229	102
18	51	48	32	27	45	108	312	712	2400	778	205	99
19	50	45	28	32	46	96	277	712	2430	874	186	95
20	49	43	27	38	45	69	355	684	2550	769	172	91
21	48	40	29	34	50	76	361	617	2710	769	160	88
22	47	38	28	28	46	76	400	625	2710	788	153	86
23	45	38	25	36	44	70	421	658	2360	677	216	84
24	44	40	24	33	47	66	434	930	2480	600	176	86
25	44	40	25	33	44	63	343	1080	2250	544	166	102
26	44	39	24	38	60	75	283	1270	2100	490	172	122
27	44	37	24	38	49	88	295	1350	2130	476	238	172
28	44	44	27	38	44	93	306	1370	2060	426	271	160
29	44	42	26	40	...	111	361	1350	1660	426	201	156
30	43	48	24	40	...	131	394	1490	1710	405	248	140
31	43	25	37	...	...	156	1370	...	468	234	...	...
Total	1672	1321	944	952	1222	2178	7611	22824	63250	28626	9025	4321
Mean.	53.9	44.0	30.5	30.7	43.6	70.3	254	736	2275	923	291	144
Max.	82	48	37	40	60	156	434	1490	3170	1600	476	271
Min.	43	37	24	23	37	33	106	255	1180	405	153	84
Acre-ft.	3320	2620	1870	1890	2420	4320	15100	45270	135400	56780	17900	8570

Total run-off for water year 1934-35 = 295,460 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Conejos River Near Mogote, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	129	66	37	35	35	40	74	1130	1110	202	109	224
2	118	81	30	34	45	37	83	1330	960	191	114	219
3	112	75	34	34	46	36	85	1660	758	168	116	215
4	110	72	34	33	42	36	76	2120	623	138	151	312
5	110	63	47	32	42	36	76	1940	695	154	473	232
6	104	66	31	32	44	37	74	2000	713	135	431	202
7	100	75	27	32	40	34	74	1470	794	129	438	175
8	99	75	37	32	46	35	116	1060	812	138	438	154
9	97	75	31	32	42	38	172	875	812	151	334	138
10	93	72	39	32	46	48	211	749	830	187	255	127
11	91	70	34	32	46	52	328	695	785	260	236	161
12	86	63	39	34	48	52	520	839	794	322	260	179
13	86	64	39	36	52	56	731	1140	713	215	198	151
14	82	64	40	38	52	67	803	1340	650	172	172	129
15	82	55	40	40	50	70	866	1380	650	151	183	116
16	81	55	45	41	50	70	1010	1780	614	138	164	106
17	81	57	44	36	48	70	1090	1880	569	138	161	102
18	77	70	45	38	46	69	1070	1880	496	124	158	102
19	77	64	45	32	45	72	980	1840	459	119	168	122
20	99	47	45	32	45	72	1080	1740	417	122	250	101
21	100	50	42	33	42	85	1250	1740	386	106	275	98
22	95	50	42	34	42	94	1520	1580	356	109	228	154
23	93	55	42	35	42	102	1640	1540	356	93	187	270
24	90	55	42	35	42	87	1450	1500	356	83	158	168
25	91	60	42	34	42	81	1560	1480	322	74	135	145
26	86	60	42	35	42	81	1570	1240	285	67	124	145
27	93	37	42	34	43	81	1470	1200	270	93	114	179
28	93	44	42	34	43	76	1520	1280	245	104	111	183
29	93	47	42	35	42	71	1420	1330	236	116	129	172
30	86	37	42	32	...	81	1090	1380	228	114	206	194
31	75	42	30	89	...	89	1200	1200	106	232	...	...
Total	2909	1824	1225	1058	1282	1954	24044	44318	17294	4419	6708	4975
Mean	93.8	60.8	39.5	34.1	44.2	63.0	800	1429	576	143	216	166
Max.	129	81	47	41	52	102	1640	2120	1110	322	473	312
Min.	75	37	27	30	34	34	74	695	228	67	109	98
Acre-ft.	5770	3620	2430	2100	2540	3870	47630	87900	34300	8760	13310	9870

Total run-off for water year 1935-36=222,100 acre-feet.

Discharge of Conejos River Near Las Sauses, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	37	31	52	52	31	31	49	1290	1100	24	34
2	3	37	30	49	54	32	29	31	1090	937	19	60
3	3	38	30	47	55	35	13	27	1200	859	21	55
4	3	33	32	46	54	37	12	41	1400	808	21	53
5	3	26	36	49	52	29	11	81	1580	757	22	53
6	3	24	42	50	52	29	11	81	1690	677	24	53
7	3	24	44	49	53	27	9	46	1870	651	35	53
8	6	24	46	50	50	27	10	91	2030	638	29	53
9	6	23	46	49	50	29	11	217	1970	597	42	49
10	8	19	47	49	49	36	11	533	2050	543	73	49
11	9	20	46	50	49	39	10	770	2160	502	77	41
12	10	24	51	54	50	39	10	671	2300	451	59	36
13	9	27	49	52	50	37	8	589	1990	425	105	32
14	11	27	49	50	49	36	6	489	1930	380	81	31
15	11	27	48	52	52	34	6	416	2090	421	47	31
16	11	32	48	50	50	39	6	418	2440	386	32	29
17	12	29	48	52	50	40	7	496	2700	320	21	26
18	12	27	49	49	49	38	8	698	2270	287	13	26
19	16	33	50	46	49	40	7	1030	1970	301	10	31
20	25	32	51	46	47	42	7	1040	1910	316	8	28
21	26	34	51	46	46	42	7	962	1950	312	7	25
22	24	34	51	46	43	41	7	771	2010	315	8	26
23	23	34	54	48	40	44	8	765	2120	307	8	26
24	43	33	51	46	41	44	15	899	1950	268	7	28
25	43	30	52	47	43	44	44	1130	1950	233	8	33
26	39	31	51	48	40	41	26	1320	1740	177	8	36
27	39	34	51	48	37	41	13	1570	1620	117	8	44
28	35	33	51	48	40	40	11	1600	1590	83	8	44
29	42	32	51	48	39	39	10	1610	1430	63	8	47
30	38	30	50	50	38	34	34	1530	1210	42	8	43
31	38	31	51	51	33	33	...	1580	1580	28	8	...
Total	557	888	1437	1517	1346	1143	398	21551	55500	13301	849	1175
Mean	18.0	29.6	46.4	48.9	48.1	36.9	13.3	695	1850	429	27.4	39.2
Max..	43	38	54	54	55	44	44	1610	2700	1100	105	60
Min..	3	19	30	46	37	27	6	27	1090	28	7	25
Acre-ft.	1100	1760	2850	3010	2670	2270	789	42750	110100	26380	1680	2330

Total run-off for water year 1934-35=197,700 acre-feet.

Discharge of Conejos River, Near Las Sauses, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	44	68	65	72	68	87	43	1100	548	4.7	1.1	44
2....	37	66	68	72	70	86	42	1120	441	5.1	1.5	47
3....	35	65	68	70	73	89	40	1240	343	4.1	4.4	52
4....	35	62	68	72	75	87	39	1530	278	4.1	5.1	56
5....	36	62	67	63	77	83	39	1800	222	4.6	1.7	62
6....	37	62	65	62	73	84	40	1940	164	4.6	4.8	58
7....	38	61	65	61	67	91	40	1640	135	3.2	108	49
8....	47	61	66	62	67	86	38	1220	99	1.3	108	36
9....	50	60	66	64	62	83	37	1050	55	3.2	114	28
10....	50	60	67	65	70	79	34	809	42	3.7	87	24
11....	50	61	69	62	70	75	36	628	34	2.7	74	28
12....	51	61	66	62	74	74	95	612	21	2.2	60	30
13....	51	61	65	67	77	72	360	711	19	2.2	51	31
14....	51	60	64	66	79	71	660	906	18	4.1	40	32
15....	49	54	64	62	83	69	859	997	16	4.0	25	33
16....	49	49	67	59	84	65	1150	1230	8.7	4.4	20	33
17....	48	48	63	60	86	61	1490	1460	4.2	3.7	19	32
18....	50	56	63	60	86	47	1630	1520	3.1	3.1	20	35
19....	52	67	62	62	88	41	1510	1490	3.5	1.6	27	32
20....	55	67	62	66	90	37	1440	1400	3.1	.6	37	30
21....	52	67	62	68	88	36	1560	1250	2.5	.6	87	26
22....	52	67	62	65	92	36	1820	1120	3.7	.6	106	31
23....	61	69	60	65	96	37	2100	942	4.1	.5	68	32
24....	63	70	60	63	103	36	2120	864	4.7	.5	58	36
25....	65	69	60	62	94	37	1860	832	4.7	1.0	51	38
26....	71	67	60	64	87	41	1900	727	3.7	1.9	38	42
27....	74	66	64	68	87	41	1830	591	3.2	1.0	29	46
28....	79	65	68	71	85	40	1660	549	2.3	1.4	29	49
29....	79	65	72	73	80	38	1620	517	2.8	2.4	29	70
30....	78	65	76	70	....	40	1270	488	3.7	1.4	30	83
31....	71	....	74	68	....	41	582	....	1.0	32	....	....
Total	1660	1881	2028	2026	2331	1890	27362	32865	2493.0	79.5	1424.1	1225
Mean.	53.5	62.7	65.4	65.4	80.4	61.0	912	1060	83.1	2.56	45.9	40.8
Max..	79	70	76	73	103	91	2120	1940	548	5.1	114	83
Min..	35	48	60	59	62	36	34	488	2.3	.5	1.1	24
Acre-ft.	3290	3730	4020	4020	4620	3750	54270	65190	4940	158	2820	2430

Total run-off for water year 1935-36=153,200 acre-feet.

Discharge of San Antonio River at Ortiz, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	1	....	....	....	....	....	30	125	106	2	6	3
2....	1	....	....	....	....	....	32	98	98	2	3	3
3....	1	....	....	....	....	....	52	98	90	2	2	3
4....	1	....	....	....	....	....	52	83	83	1	2	3
5....	1	....	....	....	....	....	52	83	69	1	6	3
6....	1	....	....	....	....	....	28	106	63	1	6	2
7....	1	....	....	....	....	....	24	125	57	3	3	2
8....	1	....	....	....	....	....	37	182	46	1	6	2
9....	1	....	....	....	....	....	24	253	42	1	15	1
10....	1	....	....	....	....	....	18	300	37	2	3	1
11....	1	....	....	....	....	....	24	316	37	2	2	0
12....	1	....	....	....	....	....	24	300	32	1	1	0
13....	1	....	....	....	....	....	32	253	28	6	3	0
14....	1	....	....	....	....	....	46	268	28	3	3	0
15....	1	....	....	....	....	....	76	224	28	3	1	0
16....	1	....	....	....	....	....	98	224	21	6	1	0
17....	1	....	....	....	....	....	98	284	18	2	0	0
18....	1	....	....	....	....	....	90	284	15	2	0	0
19....	1	....	....	....	....	....	63	253	15	9	1	1
20....	1	....	....	....	....	....	98	268	12	9	1	1
21....	1	....	....	....	....	....	115	238	9	9	0	1
22....	1	....	....	....	....	....	157	238	9	12	1	0
23....	1	....	....	....	....	....	170	253	9	21	32	1
24....	1	....	....	....	....	....	170	284	9	6	9	1
25....	1	....	....	....	....	....	106	349	6	3	6	1
26....	1	....	....	....	....	....	76	284	6	2	6	9
27....	1	....	....	....	....	....	125	253	3	2	2	21
28....	1	....	....	....	....	....	157	196	3	2	18	18
29....	1	....	....	....	....	....	170	182	3	9	9	9
30....	1	....	....	....	....	....	170	157	3	9	3	6
31....	1	....	....	....	....	....	135	....	21	3	....	....
Total	31	....	....	....	....	....	2414	6696	985	155	154	93
Mean.	1.00	....	....	....	....	....	80.5	216	32.8	5.00	4.97	3.10
Max..	1	....	....	....	....	....	170	349	106	21	32	21
Min..	1	....	....	....	....	....	18	83	3	1	0	0
Acre-ft.	61	....	....	....	....	....	4790	13280	1950	307	305	184

Total run-off for period=20,877 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of San Antonio River at Ortiz, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	3	2	....	....	....	....	22	146	16	1.0	8.3	3.8
2....	2	3	....	....	....	....	30	125	12	.6	4.1	2.1
3....	2	3	....	....	....	....	26	125	11	.3	3.8	1.8
4....	1	2	....	....	....	....	19	115	11	.1	135	2.4
5....	1	1	....	....	....	....	16	106	9.2	.1	56	1.8
6....	1	1	....	....	....	....	13	90	7.8	.1	26	1.7
7....	1	1	....	....	....	....	10	83	7.0	.1	20	1.3
8....	1	1	....	....	....	....	19	83	6.0	.1	15	1.3
9....	1	1	....	....	....	....	82	69	8.8	12	12	1.3
10....	1	1	....	....	....	....	137	69	12	14	6.0	1.1
11....	2	1	....	....	....	....	247	83	14	23	3.2	1.2
12....	2	1	....	....	....	....	300	106	11	11	2.4	3.0
13....	1	1	....	....	....	....	332	98	7.0	6.0	2.1	4.1
14....	1	1	....	....	....	....	383	83	3.5	6.0	1.6	2.1
15....	1	1	....	....	....	....	418	83	2.4	3.0	7.8	1.6
16....	2	1	....	....	....	....	491	81	1.8	1.8	4.7	1.1
17....	3	1	....	....	....	....	491	69	1.7	1.0	5.6	1.0
18....	2	1	....	....	....	....	491	57	1.1	.4	3.0	1.1
19....	2	1	....	....	....	....	436	49	.6	.2	2.4	3.0
20....	2	1	....	....	....	....	454	42	.6	9.8	90	3.5
21....	2	1	....	....	....	....	454	36	.4	8.3	26	2.7
22....	3	1	....	....	....	....	491	33	.4	30	9.8	2.7
23....	6	1	....	....	....	....	436	28	.3	7.8	3.8	3.2
24....	3	1	....	....	....	....	16	349	26	.2	4.4	2.1
25....	6	1	....	....	....	....	19	349	24	.2	2.7	1.3
26....	9	1	....	....	....	....	22	300	21	1.4	1.8	1.0
27....	9	1	....	....	....	....	30	238	21	1.3	4.7	1.8
28....	6	1	....	....	....	....	22	238	19	1.7	14	.6
29....	6	1	....	....	....	....	16	209	16	2.4	20	1.8
30....	3	1	....	....	....	....	13	170	14	1.4	8.8	1.2
31....	6	....	....	....	....	....	16	21	....	5.6	6.5	....
Total	91	36	....	....	....	....	154	7651	2021	154.2	198.7	474.6
Mean.	2.9	1.2	....	....	....	....	255	65.2	51.4	6.41	15.3	3.06
Max..	9	3	....	....	....	....	24 to	491	146	16	30	135
Min..	1	1	....	....	....	....	31	10	14	0.2	0.1	0.6
Acre-ft.	180	71	....	....	....	....	305	15180	4010	306	394	941

Total run-off for period = 21,569 acre-feet.

Discharge of San Antonio River at Mouth Near Manassa, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	0	0	0.1	0.2	1	1	1	202	752	177	11	15
2....	0	0	0.1	0.2	1	1	1	161	764	157	11	15
3....	0	0	0.1	0.2	1	1	1	166	848	157	15	12
4....	0	0	0.1	0.2	1	1	1	170	840	139	18	12
5....	0	0	0.1	0.2	1	1	1	161	790	126	15	12
6....	0	0	0.1	0.2	1	1	1	152	794	121	15	10
7....	0	0	0.1	0.2	1	1	2	173	802	114	20	8
8....	0	0	0.1	0.2	1	1	2	224	768	102	21	7
9....	0	0	0.1	0.2	1	1	2	354	745	86	41	7
10....	0	0	0.1	0.2	1	1	2	524	680	79	26	6
11....	0	0	0.1	0.2	1	1	2	688	680	72	20	5
12....	0	0	0.1	0.2	1	1	2	726	626	60	16	4
13....	0	0	0.1	0.2	1	1	2	657	581	54	16	4
14....	0	0	0.1	0.2	1	1	2	622	598	55	13	4
15....	0	0	0.1	0.2	1	1	1	654	643	64	11	3
16....	0	0	0.1	0.2	1	1	1	404	699	63	8	3
17....	0	0	0.1	0.2	1	1	1	540	609	41	6	2
18....	0	0	0.1	0.2	1	1	1	620	495	34	5	2
19....	0	0	0.1	0.2	1	1	4	780	429	32	4	2
20....	0	0	0.1	0.2	1	1	15	741	423	40	3	1
21....	0	0	0.1	0.2	1	1	37	639	414	42	3	1
22....	0	0	0.1	0.2	1	1	71	602	417	40	2	1
23....	0	0	0.1	0.2	1	1	111	646	423	40	2	1
24....	0	0	0.1	0.2	1	2	163	703	372	35	2	1
25....	0	0	0.1	0.2	1	1	146	870	331	28	2	1
26....	0	0	0.1	0.2	1	1	110	1100	286	24	2	1
27....	0	0	0.1	0.2	1	1	100	1110	264	21	2	4
28....	0	0	0.1	0.2	1	1	113	1080	261	18	2	9
29....	0	0	0.1	0.2	1	1	177	1050	236	15	2	12
30....	0	0	0.1	0.2	1	1	226	992	202	13	2	10
31....	0	....	0.1	0.2	1	....	908	....	11	2	....	....
Total	0	0	3.1	6.2	28	32	1299	18419	16772	2060	318	179
Mean.	0	0	0.10	0.20	1.00	1.03	43.3	594	559	66.5	10.3	5.97
Max..	0	0	0.1	0.2	1	2	226	1110	848	177	41	15
Min..	0	0	0.1	0.2	1	1	152	202	11	2	1	1
Acre-ft.	0	0	6	12	56	63	2580	36530	33270	4090	631	355

Total run-off for water year 1934-35=77,590 acre-feet.

Discharge of San Antonio River at Mouth, Near Manassa, Colo., for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	.	.	.	.	10	30	652	162	2.6	.4	9.4
2	9	.	.	.	.	10	30	613	145	2.6	.3	7.8
3	8	.	.	.	.	10	30	728	125	1.5	.4	5.8
4	8	.	.	.	.	10	30	806	110	1.0	.4	5.0
5	7	.	.	.	.	10	30	876	98	.7	13	2.8
6	7	.	.	.	.	10	40	784	90	.6	36	1.2
7	6	.	.	.	.	10	40	596	70	.5	24	1.0
8	6	*6	.	*	3	10	40	532	51	.6	36	.7
9	6	.	.	.	.	10	40	463	33	.8	31	.7
10	6	.	.	.	.	10	40	326	28	.8	19	.5
11	6	.	.	.	.	10	300	295	31	.7	14	.6
12	6	.	.	.	.	10	300	332	29	.8	14	.8
13	6	.	.	.	.	10	300	362	31	.7	18	.7
14	5	.	.	.	.	10	300	394	24	.7	11	.6
15	5	.	.	.	.	10	300	385	16	.7	11	.5
16	5	.	*	3	.	10	750	390	13	.7	8.2	.4
17	5	.	*	4	.	10	750	400	9.8	.6	5.8	.4
18	6	.	.	.	*	15	10	750	380	5.0	.5	3.4
19	6	.	.	.	.	10	750	360	2.1	.4	3.0	.5
20	6	.	.	.	.	10	750	330	1.7	.4	9.0	.4
21	6	.	.	.	.	20	1000	300	1.2	.4	93	.4
22	9	.	.	.	.	20	1050	283	.8	.7	33	.6
23	11	.	.	.	.	20	1180	256	.8	.4	15	.6
24	15	.	.	.	.	20	1080	229	1.2	.2	10	.5
25	14	.	.	.	.	20	1070	211	1.5	.1	7.8	.4
26	14	.	.	.	.	30	1080	170	3.0	.1	5.0	1.2
27	15	*6	.	.	.	30	946	150	3.0	.3	3.0	2.3
28	15	.	.	.	.	30	949	120	2.3	.4	2.6	5.0
29	14	.	.	.	.	30	900	102	1.9	.4	3.0	14
30	10	.	.	.	.	30	708	113	2.3	.4	3.4	16
31	8	.	.	.	.	30	189	189	...	.4	9.8	...
Total	258	180	140	93	290	480	15563	12127	1092.6	21.7	443.5	\$1.2
Mean	8.3	6	4.5	3	10	15.5	519	391	36.4	0.70	14.3	2.71
Max..	15	.	.	.	.	...	1180	876	162	2.6	93	16
Min..	5	.	.	.	.	...	30	102	0.8	0.1	0.3	0.4
Acre-ft.	512	357	278	184	575	952	30870	24050	2170	43	880	161

Total run-off for water year 1935-36=61,032 acre-feet.

Discharge of Los Pinos River Near Ortiz, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	13	.	.	.	.	41	317	875	288	69	55
2	18	16	.	.	.	45	259	960	266	72	49	41
3	17	10	.	.	.	57	235	1020	252	59	41	40
4	17	12	.	.	.	51	194	1050	232	51	40	40
5	17	19	.	.	.	76	180	960	203	110	40	40
6	17	17	.	.	.	81	232	990	186	98	35	35
7	17	18	.	.	.	55	310	970	186	67	30	25
8	17	18	.	.	.	62	474	920	175	65	25	25
9	17	18	.	.	.	60	594	855	159	57	20	20
10	17	18	.	.	.	52	718	812	141	48	20	20
11	17	16	.	.	.	51	816	783	127	51	20	20
12	17	18	.	.	.	52	793	666	124	74	20	20
13	16	18	.	.	.	62	689	690	127	51	20	20
14	16	14	.	.	.	83	616	760	114	43	20	20
15	14	13	.	.	.	127	535	845	129	38	20	20
16	14	12	.	.	.	175	566	765	98	44	19	19
17	13	18	.	.	.	194	589	705	89	37	19	19
18	14	16	.	.	.	178	662	652	94	34	18	18
19	14	14	.	.	.	162	571	652	146	32	18	18
20	14	11	.	.	.	222	594	650	118	32	18	18
21	13	11	.	.	.	246	576	670	110	28	17	17
22	14	11	.	.	.	291	634	675	110	28	17	17
23	17	10	.	.	25	332	755	555	89	32	17	17
24	13	10	.	.	26	344	895	469	81	28	17	17
25	13	10	.	.	23	242	1060	478	67	27	24	24
26	14	10	.	.	26	200	1140	436	60	30	32	32
27	15	10	.	.	31	226	1100	416	59	92	55	55
28	15	10	.	.	29	310	1110	401	55	81	42	42
29	14	10	.	.	33	401	1080	344	54	51	42	42
30	13	10	.	.	39	408	1080	306	54	100	33	33
31	13	.	.	.	41	.	940	...	60	69	...	...
Total	475	411	.	.	273	4886	20314	21330	4053	1698	843	843
Mean	15.3	13.7	.	.	Mar.	163	655	711	131	54.8	28.1	28.1
Max..	18	19	.	.	23 to	408	1140	1050	288	110	55	55
Min..	13	10	.	.	31	41	180	306	54	27	17	17
Acre-ft.	942	815	.	.	541	9690	40290	42310	8040	3370	1670	1670

Total run-off for period=107,668 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Los Pinos River Near Ortiz, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.		
1....	32	15	.....	.....	.....	.....	70	786	272	51	29	42
2....	29	15	.....	.....	.....	.....	34	863	244	44	31	37
3....	26	15	.....	.....	.....	.....	35	924	225	38	28	38
4....	24	15	.....	.....	.....	.....	25	1020	207	36	60	63
5....	24	14	.....	.....	.....	.....	30	1030	193	32	140	45
6....	22	14	.....	.....	.....	.....	26	814	188	30	73	35
7....	23	14	.....	.....	.....	.....	25	590	186	28	92	31
8....	23	.....	.....	.....	.....	.....	35	434	176	30	78	28
9....	23	.....	.....	.....	.....	.....	66	365	171	36	57	26
10....	22	.....	.....	.....	.....	.....	94	339	171	71	39	26
11....	22	.....	.....	.....	.....	.....	178	380	171	87	33	34
12....	19	.....	.....	.....	.....	.....	260	472	181	82	48	34
13....	19	.....	.....	.....	.....	.....	376	542	164	51	32	26
14....	18	.....	.....	.....	.....	.....	547	556	155	38	27	25
15....	18	.....	.....	.....	.....	.....	836	538	149	37	34	22
16....	18	.....	.....	.....	.....	.....	1020	630	149	35	27	22
17....	18	.....	.....	.....	.....	.....	1060	610	134	37	28	22
18....	18	.....	.....	.....	.....	.....	952	552	122	32	28	26
19....	19	.....	.....	.....	.....	.....	885	538	109	28	34	26
20....	26	.....	.....	.....	.....	.....	1040	489	103	26	112	24
21....	30	.....	.....	.....	.....	.....	1230	455	94	28	75	22
22....	24	.....	.....	.....	.....	.....	1300	418	87	38	52	29
23....	24	.....	.....	.....	.....	.....	1200	418	83	26	36	46
24....	22	35	1070	380	83	22	31	28	
25....	20	34	1150	355	82	21	27	24	
26....	20	35	1070	323	75	20	26	25	
27....	20	35	1010	308	68	24	24	49	
28....	20	26	1070	302	63	30	24	44	
29....	20	26	885	290	58	28	33	38	
30....	20	25	731	302	55	32	66	52	
31....	20	.....	.....	.....	.....	.....	30	326	26	55	..	..
Total	683	102	246	18310	16349	4218	1144	1479	.989	
Mean.	22.0	Nov.	Mar.	610	527	141	36.9	47.7	33.0
Max.	32	1 to	24 to	1300	1030	272	87	140	63	
Min.	18	7	31	25	290	52	20	24	22	
Acre-ft.	1350	202	488	36320	32430	8370	2270	2930	1960	

Total run-off for period = 86,320 acre-feet.

Discharge of Culebra River at San Luis, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	24	25	.....	.....	.....	.....	11	16	48	182	222	18
2....	23	26	.....	.....	.....	.....	10	17	40	176	189	34
3....	24	24	.....	.....	.....	.....	11	16	62	149	170	40
4....	24	27	.....	.....	.....	.....	10	14	75	72	203	39
5....	24	26	.....	.....	.....	.....	10	9	110	141	181	41
6....	23	26	.....	.....	.....	.....	8	10	66	161	148	41
7....	13	26	.....	.....	.....	.....	10	12	135	143	121	46
8....	22	21	.....	.....	.....	.....	10	13	136	175	98	44
9....	21	17	.....	.....	.....	.....	13	14	109	170	120	41
10....	24	24	.....	.....	.....	.....	12	14	153	175	112	36
11....	24	14	.....	.....	.....	.....	12	15	182	161	85	30
12....	22	16	.....	.....	.....	.....	12	9	184	140	128	28
13....	22	15	.....	.....	.....	.....	10	32	177	71	124	26
14....	13	22	.....	.....	.....	.....	7	46	185	54	109	27
15....	18	18	.....	.....	.....	.....	8	47	161	42	118	16
16....	24	14	.....	.....	.....	.....	8	54	163	40	130	15
17....	27	19	.....	.....	.....	.....	8	44	169	59	116	28
18....	27	10	.....	.....	.....	.....	8	33	173	53	93	27
19....	26	17	.....	.....	.....	.....	8	19	204	44	95	22
20....	26	22	.....	.....	.....	.....	8	24	198	73	110	24
21....	29	23	.....	.....	.....	.....	7	20	171	30	85	24
22....	27	19	.....	.....	.....	.....	7	21	164	43	63	25
23....	22	16	.....	.....	.....	.....	14	20	160	73	53	27
24....	24	16	.....	.....	.....	.....	17	27	186	96	57	26
25....	23	11	.....	.....	.....	.....	18	39	198	143	52	32
26....	22	15	.....	.....	.....	.....	12	38	213	184	40	33
27....	22	17	.....	.....	.....	.....	13	39	217	200	53	36
28....	23	18	.....	.....	.....	.....	11	41	210	186	54	26
29....	22	11	.....	.....	.....	.....	15	41	194	176	49	15
30....	22	12	.....	.....	.....	.....	15	36	152	185	44	23
31....	20	.....	.....	.....	.....	.....	..	36	176	30	..	..
Total	707	567	.....	.....	.....	.....	323	816	4595	3773	3252	.890
Mean.	22.8	18.9	20	20	15	15	10.8	26.3	153	122	105	29.7
Max.	29	27	.....	.....	.....	.....	18	54	217	200	222	46
Min.	13	10	.....	.....	.....	.....	7	9	40	30	30	15
Acre-ft.	1400	1120	1230	1230	833	922	641	1620	9110	7480	6450	1770

Total run-off for water year 1934-35 = 33,810 acre-feet.

Discharge of Culebra River at San Luis, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	27	37	30	30	26	28	26	39	199	171	39	45
2....	26	36	30	29	16	27	25	37	219	156	46	45
3....	23	32	29	28	25	27	26	15	235	188	55	45
4....	25	39	29	28	20	28	23	38	223	8,9	42	34
5....	26	36	30	28	28	28	16	40	224	7,6	50	27
6....	16	45	30	27	26	28	16	42	219	50	60	14
7....	26	50	30	28	25	27	16	62	193	148	79	22
8....	31	45	29	28	20	17	16	44	183	147	46	23
9....	34	29	29	23	11	26	17	34	201	144	46	37
10....	31	38	28	27	10	26	16	23	223	161	50	43
11....	32	36	30	26	16	27	16	37	212	150	49	44
12....	30	30	30	16	27	27	16	39	200	97	40	34
13....	26	33	30	17	26	26	23	43	188	91	54	18
14....	27	35	30	26	26	24	29	43	170	115	103	32
15....	29	30	27	27	25	18	29	45	212	125	93	23
16....	30	30	27	27	14	25	28	47	215	116	26	24
17....	26	36	27	26	25	25	28	45	211	101	75	24
18....	29	32	28	26	28	27	28	49	196	83	67	25
19....	30	31	27	13	28	26	15	57	211	79	74	26
20....	32	32	30	20	17	25	25	57	194	115	73	16
21....	41	31	28	28	15	26	29	56	178	134	51	24
22....	49	32	27	28	16	27	29	63	24	123	18	27
23....	44	32	27	28	17	26	29	68	12	118	13	27
24....	45	19	25	28	17	25	29	73	195	84	11	36
25....	44	30	15	29	17	27	26	86	222	104	21	36
26....	42	32	27	17	15	25	15	136	207	6,2	37	36
27....	39	32	28	28	13	25	28	172	217	9,7	31	23
28....	35	29	30	30	16	28	28	188	190	44	50	33
29....	36	29	26	30	24	28	29	194	178	39	56	36
30....	35	30	28	28	28	40	182	179	46	34	32	
31....	35	29	29	29	28	28	28	163	44	49		
Total	1001	1018	870	803	589	805	716	2217	5730	2905.4	1538	911
Mean.	32.3	33.9	28.1	25.9	20.3	26.0	23.9	71.5	191	93.7	49.6	30.4
Max..	49	50	30	30	28	28	40	194	235	171	103	45
Min..	16	19	15	13	10	17	15	15	12	6,2	11	14
Acre-ft.	1990	2020	1730	1590	1170	1600	1420	4400	11370	5760	3050	1810

Total run-off for water year 1935-36=37,910 acre-feet.

Discharge of Culebra River at Mouth Near San Acacia, Colorado, for Year Ending Dec. 31, 1936

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1....	0	0	0	0	0	0	0
2....	0	0	0	0	0	0	0
3....	0	0	1.9	0	0	0	0
4....	0	0	1.5	0	0	0	0
5....	0	0	14	0	0	0	0
6....	0	0	4.6	0	0	0	0
7....	0	0	0	0	0	0	0
8....	0	0	0	0	0	0	0
9....	0	0	0	0	0	0	0
10....	0	0	0	0	0	0	0
11....	0	0	0	0	0	0	0
12....	0	0	0	0	0	0	0
13....	0	0	0	0	0	0	0	0
14....	0	0	0	0	0	0	0	0	0
15....	0	0	0	0	0	0	0	0	0
16....	0	0	0	0	0	0	0	0	0
17....	0	0	0	0	0	0	0	0	0
18....	0	0	0	0	0	0	0	0	0
19....	0	0	0	0	0	0	0	0	0
20....	0	0	0	0	19	0	0	0	0
21....	0	0	0	0	7.6	0	0	0	0
22....	0	0	0	0	0	0	0	0	0
23....	0	0	0	0	0	0	0	0	0
24....	0	0	0	0	0	0	0	0	0
25....	0	0	0	0	0	0	0	0	0
26....	0	0	0	0	0	0	0	0	0
27....	0	0	0	0	0	0	0	0	0
28....	0	0	0	2.1	0	0	0	0	0
29....	0	0	0	0	0	0	0	0	0
30....	0	0	0	0	0	0	0	0	0
31....	0	0	0	2.7	0	0	0	0	0
Total	0	0	4.8	48.6	0	0	0	0	0
Mean.	0	0	0.16	1.57	0	0	0	0	0
Max..	0	0	2.7	19	0	0	0	0	0
Min..	0	0	0	0	0	0	0	0	0
Acre-ft.	0	0	9.5	96	0	0	0	0	0

Total run-off for period=106 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Costilla Creek at Mouth Near Jaroso, Colorado, for Year Ending Oct. 31, 1936

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1....	0	0	0	0	0	0
2....	0	0	0	0	0	0
3....	0	0	0	0	0	0
4....	0	0	0	0	0	0
5....	0	0	0	0	0	0
6....	0	0	0	0	0	0
7....	0	0	0	0	0	0
8....	0	0	0	0	0	0
9....	0	0	0	0	0	0
10....	0	0	0	0	0	0
11....	0	0	0	0	0	0
12....	0	0	0	0	0	0
13....	0	0	0	0	0	0
14....	0	0	0	0	0	0
15....	0	0	0	0	0	0
16....	0	0	0	0	0	0
17....	0	0	0	0	0	0
18....	0	0	0	0	0	0
19....	0	0	0	0	0	0
20....	0	0	0	0	0	0
21....	0	0	0	0	0	0
22....	0	0	0	0	0	0
23....	0	0	0	0	0	0
24....	0	0	0	0	0	0
25....	0	0	0	0	0	0
26....	0	0	0	0	0	0
27....	0	0	0	0	0	0
28....	0	0	0	0	0	0
29....	0	0	0	0	0	0
30....	0	0	0	0	0	0
31....	0	....	0	0	....	0
Total							0	0	0	0	0	0
Mean.							0	0	0	0	0	0
Min...							0	0	0	0	0	0
Acre-ft.							0	0	0	0	0	0

Discharge of La Garita Creek Near La Garita, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	3	....	....	....	....	....	6	11	51	27	15	12
2....	3	....	....	....	....	....	6	10	52	27	12	8
3....	3	....	....	....	....	....	6	11	57	25	11	8
4....	3	....	....	....	....	....	6	12	61	23	11	8
5....	3	....	....	....	....	....	6	10	60	21	12	9
6....	3	....	....	....	....	....	8	11	58	20	11	8
7....	3	....	....	....	....	....	8	14	52	19	16	9
8....	3	....	....	....	....	....	8	17	49	18	11	12
9....	3	....	....	....	....	....	8	20	51	23	11	12
10....	3	....	....	....	....	....	8	19	64	19	12	8
11....	3	....	....	....	....	....	8	27	66	20	11	7
12....	3	....	....	....	....	....	8	32	63	18	11	8
13....	3	....	....	....	....	....	9	32	62	19	9	7
14....	3	....	....	....	....	....	9	25	64	22	8	6
15....	3	....	....	....	....	....	22	26	66	15	7	6
16....	3	....	....	....	....	....	16	24	65	13	7	6
17....	3	....	....	....	....	....	14	27	56	14	7	6
18....	3	....	....	....	....	....	11	29	52	20	7	6
19....	3	....	....	....	....	....	11	29	48	18	6	6
20....	3	....	....	....	....	....	19	30	47	18	6	6
21....	2	....	....	....	....	....	17	30	43	18	6	6
22....	2	....	....	....	....	....	17	33	41	24	6	6
23....	3	....	....	....	....	....	23	38	39	20	7	6
24....	3	....	....	....	....	....	18	49	36	20	6	6
25....	3	....	....	....	....	....	11	57	33	19	6	7
26....	3	....	....	....	....	....	11	58	32	14	14	12
27....	3	....	....	....	....	....	11	61	30	13	10	10
28....	3	....	....	....	....	....	12	58	29	13	9	8
29....	3	....	....	....	....	....	10	56	29	13	6	6
30....	3	....	....	....	....	....	12	54	28	14	12	7
31....	3	....	....	....	....	....	52	18	10	10	10	10
Total	91						339	962	1484	590	293	232
Mean.	2.94						11.3	31.0	49.5	19.0	9.45	7.73
Max...	3						23	61	66	27	15	12
Min...	2						6	10	28	13	6	6
Acre-ft.	180						672	1910	2940	1170	581	460

Total run-off for period = 7,913 acre-feet.

Discharge of La Garita Creek Near La Garita, Colorado, for Year Ending Sept. 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	6	5	....	....	....	....	....	7.2	21	8.8	12	36
2....	6	5	....	....	....	....	....	9.2	18	9.5	12	26
3....	7	4	....	....	....	....	....	11	18	11	12	24
4....	7	4	....	....	....	....	....	14	18	10	32	23
5....	6	4	....	....	....	....	....	16	18	8.1	32	19
6....	5	4	....	....	....	....	....	17	17	6.0	35	17
7....	6	4	....	....	....	....	....	14	16	6.7	44	15
8....	6	4	....	....	....	....	....	12	14	8.1	36	13
9....	6	4	....	....	....	....	....	12	11	8.8	26	13
10....	7	4	....	....	....	....	....	12	10	8.8	23	13
11....	6	4	....	....	....	....	....	33	16	11	10	19
12....	6	4	....	....	....	....	....	42	25	11	10	15
13....	6	4	....	....	....	....	....	31	21	12	7.4	16
14....	6	4	....	....	....	....	....	27	19	10	5.6	17
15....	6	4	....	....	....	....	....	34	21	9.8	5.2	19
16....	6	4	....	....	....	....	....	39	27	11	5.2	16
17....	7	4	....	....	....	....	....	55	22	11	4.5	12
18....	6	4	....	....	....	....	....	44	21	9.8	4.5	13
19....	6	4	....	....	....	....	....	25	21	9.8	4.9	14
20....	8	3	....	....	....	....	....	21	21	9.8	4.9	24
21....	7	3	....	....	....	....	....	27	20	9.2	4.5	30
22....	6	3	....	....	....	....	....	24	19	9.8	7.4	34
23....	8	3	....	....	....	....	....	33	19	9.2	6.0	30
24....	7	3	....	....	....	....	....	25	21	14	4.5	23
25....	8	3	....	....	....	....	....	21	20	12	3.7	23
26....	10	3	....	....	....	....	....	18	21	10	3.3	21
27....	9	3	....	....	....	....	....	14	22	9.8	4.1	19
28....	8	3	....	....	....	....	....	12	21	10	6.7	21
29....	7	3	....	....	....	....	....	13	19	11	7.4	13
30....	5	3	....	....	....	....	....	7.7	18	9.2	18	30
31....	5	....	....	....	....	....	....	24	....	40	34	....
Total	205	111	....	....	....	....	....	545.7	562.4	370.4	253.6	721
Mean..	6.6	3.7	....	....	....	....	....	Apr. 11	18.1	12.3	8.18	23.3
Max..	10	5	....	....	....	....	....	to	27	21	40	44
Min...Acre-ft.	5	3	....	....	....	....	....	30	7.2	9.2	3.3	12
Acre-ft.	407	220	....	....	....	....	....	1080	1120	735	503	1430
Total run-off for period	= 6,346 acre-feet.											
Mean.	4.80	1.43	....	....	....	....	....	....	....	....	....	....
Max.	10	1.0	....	....	....	....	....	....	....	....	....	....
Min.	1	0.88	....	....	....	....	....	....	....	....	....	....
Acre-ft.	286	144	....	....	....	....	....	....	....	....	....	....

Discharge of Carnero Creek Near La Garita, Colorado, for Year Ending Sept. 30, 1935												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	2	....	....	....	....	....	14	13	47	15	18	10
2....	2	....	....	....	....	....	12	10	56	15	15	8
3....	2	....	....	....	....	....	14	11	56	15	15	8
4....	2	....	....	....	....	....	14	14	56	15	12	5
5....	2	....	....	....	....	....	10	14	56	12	15	8
6....	2	....	....	....	....	....	8	16	56	12	12	5
7....	2	....	....	....	....	....	6	16	56	10	12	8
8....	2	....	....	....	....	....	6	23	56	12	12	10
9....	2	....	....	....	....	....	6	23	47	18	12	8
10....	2	....	....	....	....	....	6	20	47	24	10	5
11....	2	....	....	....	....	....	4	20	42	32	10	5
12....	2	....	....	....	....	....	6	20	42	28	10	5
13....	2	....	....	....	....	....	9	24	36	21	10	4
14....	2	....	....	....	....	....	12	24	42	21	10	4
15....	2	....	....	....	....	....	14	24	42	21	10	4
16....	5	....	....	....	....	....	17	27	42	18	8	4
17....	5	....	....	....	....	....	17	31	42	18	8	4
18....	4	....	....	....	....	....	14	42	42	42	8	2
19....	4	....	....	....	....	....	12	42	32	32	8	2
20....	4	....	....	....	....	....	14	47	32	36	5	2
21....	4	....	....	....	....	....	14	47	24	32	5	1
22....	4	....	....	....	....	....	14	56	21	32	8	1
23....	4	....	....	....	....	....	15	56	21	24	12	1
24....	4	....	....	....	....	....	15	64	21	24	18	1
25....	4	....	....	....	....	11	10	76	18	24	24	2
26....	4	....	....	....	....	11	10	76	18	21	24	8
27....	4	....	....	....	....	11	10	76	18	21	15	5
28....	4	....	....	....	....	11	10	64	18	15	18	4
29....	4	....	....	....	....	11	13	56	18	15	10	5
30....	4	....	....	....	....	11	13	47	15	15	12	5
31....	4	....	....	....	....	11	....	47	18	10	10	....
Total	96	....	....	....	....	77	339	1126	1119	658	376	144
Mean.	3.10	....	....	....	....	Mar. 25	11.3	36.3	37.3	21.2	12.1	4.80
Max.	5	....	....	....	....	to	17	76	56	42	24	10
Min.	2	....	....	....	....	31	4	10	15	10	5	1
Acre-ft.	190	....	....	....	....	153	672	2230	2220	1310	746	286

Total run-off for period = 7,807 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Carnero Creek Near La Garita, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								12	18	8.6	15	30
2								11	15	7.6	11	25
3								12	17	5.7	23	23
4								12	17	4.5	33	22
5								11	15	3.9	26	18
6								11	12	4.1	26	16
7		5						11	10	3.7	26	15
8								9.6	9.1	7.2	27	14
9								9.6	8.6	8.1	26	14
10		5						12	8.1	9.1	26	12
11							11	15	7.6	6.2	24	14
12								22	8.6	5.7	21	13
13								19	8.1	4.7	22	12
14								19	7.6	3.9	22	11
15								18	6.7	3.7	26	9.8
16								20	10	3.5	22	8.9
17								21	7.6	3.3	16	8.1
18								20	6.1	3.5	17	8.5
19								20	5.7	9.1	19	10
20								19	4.7	9.4	28	8.9
21								18	4.7	6.3	41	8.1
22		5						16	7.6	6.7	58	7.6
23								15	8.6	5.0	48	7.2
24								15	10	3.6	45	6.7
25								18	11	2.8	41	6.3
26								16	7.2	1.9	35	6.3
27							11	16	8.1	2.2	33	8.5
28							12	16	9.1	4.4	32	10
29							13	16	9.6	5.0	32	10
30							12	18	9.1	5.0	38	10
31		5						20		9.8	38	
Total	155							488.2	288.1	168.2	897	375.9
Mean.	5							15.7	9.60	5.43	28.9	12.5
Max.								22	18	9.8	58	30
Min.								9.6	4.7	1.9	11	6.3
Acre-ft.	307							968	571	334	1780	746

Total run-off for period=4,706 acre-feet.

Discharge of Saguache Creek Near Saguache, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	23				20	29	40	139	122	158	65
2	27	27				20	33	40	133	116	160	60
3	26	19				20	36	45	148	120	96	52
4	25	25				20	39	55	163	106	175	44
5	23	30				20	37	57	189	86	98	41
6	23	25				25	35	57	212	82	81	40
7	23	25				25	27	40	233	116	86	54
8	23	23				25	35	40	257	131	88	74
9	22	23				25	32	46	273	158	81	65
10	22	25				25	27	50	317	156	102	53
11	22	24				30	38	52	363	153	92	41
12	22	25				30	33	52	389	128	81	35
13	23	23				30	31	76	320	98	81	34
14	25	23				30	37	78	311	108	71	33
15	26	19				30	48	61	372	128	64	32
16	23	19				35	49	54	342	128	55	32
17	22	25				35	44	68	320	128	55	31
18	23	24				37	38	114	220	151	48	31
19	22	19				34	34	90	204	108	42	31
20	22	19				33	37	81	199	98	41	30
21	20	21				26	49	79	199	163	41	26
22	22	19				25	53	71	189	146	40	26
23	23	22				26	50	79	177	124	58	29
24	23	24				29	43	96	168	102	79	27
25	25	23				32	46	126	153	92	88	39
26	24	22				29	40	135	142	84	78	70
27	23	22				28	40	126	131	78	70	78
28	22	22				23	39	133	126	71	61	60
29	22	22				24	40	126	122	102	52	52
30	20	23				26	40	137	131	156	48	47
31	21					39		148		158	55	
Total	717	685				856	1159	2452	6647	3697	2425	1332
Mean.	23.1	22.8				27.6	38.6	79.1	221	119	78.2	44.4
Max.	28	30				39	53	148	389	163	175	78
Min.	20	19				20	27	40	122	71	40	26
Acre-ft.	1420	1360				1700	2300	4860	13170	7330	4810	2640

Total run-off for period=39,590 acre-feet.

Discharge of Saguache Creek Near Saguache, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55					33	20	59	112	62	79	62
2	50					33	17	68	93	52	87	54
3	49					34	22	83	99	44	84	58
4	47					36	21	102	84	39	98	65
5	46					33	20	112	72	38	98	57
6	44					33	19	116	66	37	111	50
7	47					32	19	108	66	35	111	46
8	44					32	22	104	63	33	94	43
9	41					32	25	92	69	43	82	41
10	38					31	22	75	68	58	80	41
11	37					31	25	68	75	72	76	42
12	36					30	41	76	80	76	80	42
13	35					30	79	83	70	63	82	40
14	37					34	104	89	72	43	75	38
15	36					33	98	87	68	37	72	36
16	35					32	96	99	70	37	62	33
17	34					35	104	111	59	38	56	32
18	35					36	105	102	53	38	54	32
19	35					33	92	100	49	46	53	34
20	44					31	83	105	58	45	68	33
21	45					30	96	110	61	41	87	32
22	40					28	98	108	63	47	79	33
23	38					23	110	110	69	46	66	33
24	42					19	99	114	61	38	53	31
25	38					19	99	122	61	35	46	30
26	44					16	87	117	69	35	43	31
27	43					33	19	76	117	61	37	41
28	41					31	21	69	108	65	61	58
29	40					32	23	66	104	70	57	61
30	39					23	61	114	68	76	57	59
31	39					26	123	123	83	65		
Total	1274					901	1895	3086	2094	1492	2238	1290
Mean.	41.1					29.1	63.2	99.5	69.8	48.1	72.2	43.0
Max.	55					36	110	123	112	83	111	65
Min.	34					16	17	59	49	33	41	30
Acre-ft.	2530					1790	3760	6120	4150	2960	4440	2560

Total run-off for period=28,310 acre-feet.

Discharge of Kerber Creek at Ashley Ranch, Near Villa Grove, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								30	36	13	20	14
2								30	35	10	23	13
3								33	32	8.2	28	16
4								37	27	8.9	27	16
5								39	25	8.9	36	16
6								39	23	7.8	51	14
7								35	23	6.8	54	15
8								32	24	6.8	47	13
9								30	24	7.8	43	11
10								25	26	7.8	43	12
11								20	25	10	38	11
12								28	23	11	34	10
13								36	21	7.8	32	9.3
14								37	21	6.2	27	8.5
15								42	21	6.5	29	8.2
16								45	20	5.3	23	7.8
17								46	19	6.8	21	7.4
18								48	18	7.1	20	7.4
19								48	17	6.5	23	7.4
20								50	16	6.5	27	7.1
21								48	15	6.8	24	6.8
22								47	18	5.3	22	6.8
23								46	18	4.2	20	6.5
24								43	16	3.7	19	5.9
25								40	16	3.5	16	5.9
26								40	16	4.2	15	6.2
27								39	14	5.6	14	6.2
28								37	13	12	14	7.1
29								36	13	13	16	7.4
30								39	11	23	16	8.2
31								38	23	14		
Total								1183	626	264	836	291.1
Mean.								38.2	20.9	8.52	27.0	9.70
Max.								50	36	23	54	16
Min.								20	11	3.5	14	5.9
Acre-ft.								2350	1240	524	1660	577

Total run-off for period=6,350 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

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Discharge of North Crestone Creek Near Crestone, Colorado, for Year Ending Sept. 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	24	15	140	24
2	15	20	14	118	24
3	20	16	13	123	36
4	20	16	12	126	39
5	22	15	11	142	34
6	17	15	10	364	28
7	13	16	9.6	188	25
8	11	17	9.1	140	23
9	13	18	9.6	91	21
10	12	18	12	67	20
11	12	17	55	55	19
12	16	17	65	57	18
13	21	17	35	49	18
14	25	17	27	40	16
15	30	16	24	34	16
16	37	16	24	32	14
17	35	15	24	29	14
18	30	14	24	27	14
19	31	13	23	26	12
20	30	12	23	34	12
21	24	11	21	36	10
22	22	11	20	34	10
23	25	11	19	30	9.7
24	27	11	18	27	8.2
25	28	9.9	16	24	8.2
26	28	9.9	15	22	8.2
27	27	17	18	20	8.8
28	27	20	45	20	9.4
29	29	19	35	22	10
30	27	16	38	24	11
31	25	..	52	24	..
Total	714	464.8	736.3	2165	520.5
Mean.	23.0	15.5	23.8	69.8	17.4
Max..	37	24	65	364	39
Min..	11	9.9	9.1	20	8.2
Acre-ft.	1420	922	1460	4290	1030

Total run-off for period = 9,120 acre-feet.

Discharge of South Crestone Creek Near Crestone, Colorado, for Year Ending Nov. 30, 1936												
Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1	0.7	2.6	1.7	17	11	2.3	1.0
29	1.8	1.6	16	11	2.3	.9
3	1.4	1.2	1.4	15	13	1.8	1.1
4	2.3	1.1	1.5	16	13	1.8	2.3
5	2.3	1.1	1.4	19	9.6	1.7	1.2
6	2.0	1.0	1.2	28	7.6	1.7	1.1
7	1.4	1.0	1.2	25	7.3	1.6	1.1
89	1.5	1.2	17	6.5	1.5	1.1
9	1.2	1.8	1.5	11	5.4	1.5	1.2
10	1.4	2.0	4.3	6.9	5.4	1.4	1.0
11	1.5	1.7	16	7.6	5.0	1.4	1.0
12	1.8	1.7	13	11	5.0	1.2	.9
13	2.8	1.7	7.3	6.9	4.7	1.2	1.0
14	3.8	1.7	5.1	6.9	4.0	1.2	1.0
15	4.7	1.8	4.7	6.9	3.3	1.4	1.0
16	5.8	1.7	3.8	5.8	2.8	1.4	1.1
17	5.4	1.6	4.7	5.4	2.6	1.2	1.1
18	4.3	1.6	4.7	5.0	2.3	1.0	1.2
19	4.0	1.6	4.0	4.7	2.3	.9	1.2
20	4.3	1.6	3.3	6.9	2.0	1.1	1.4
21	3.3	1.5	2.8	7.3	1.8	1.1	1.2
22	2.8	1.5	2.3	6.9	1.8	1.0	1.4
23	2.8	1.5	1.8	6.2	1.6	1.0	1.5
24	3.8	1.2	1.6	5.4	1.5	1.0	1.1
25	4.7	1.1	1.5	4.3	1.5	1.0	.7
26	5.0	1.6	1.4	4.0	1.5	1.2	.7
27	3.8	4.3	2.3	4.0	1.7	1.1	.8
28	3.8	3.6	16	4.0	1.7	1.1	1.0
29	4.0	3.0	11	6.2	1.8	.9	.5
30	4.7	2.0	9.6	10	1.8	1.1	.5
31	3.0	..	10	11	1.2	..	..
Total	94.6	53.1	144.2	307.3	140.5	41.3	32.3
Mean.	3.05	1.77	4.65	9.91	4.68	1.33	1.08
Max..	5.8	4.3	16	28	13	2.3	2.3
Min..	0.7	1.0	1.2	4.0	1.5	0.9	0.5
Acre-ft.	188	105	286	610	278	82	64

Total run-off for period = 1,613 acre-feet.

Discharge of Willow Creek Near Crestone, Colorado, for Year Ending Nov. 30, 1936

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1						2.5	9.7	7.8	43	19	4.2	3.4
2						2.7	6.8	6.0	33	16	4.5	3.4
3						4.3	4.6	5.4	34	21	4.9	3.1
4						7.1	3.9	4.9	49	21	5.3	3.1
5						8.6	3.0	4.3	95	18	5.6	2.2
6						7.5	2.9	4.1	240	15	5.6	1.8
7						5.4	3.2	4.1	80	13	5.1	1.6
8						3.9	5.1	5.1	28	11	4.9	1.7
9						3.9	8.2	6.8	15	9.4	4.7	2.5
10						3.4	11	14	9.7	10	4.7	2.1
11						3.6	9.7	25	14	11	4.7	2.1
12						3.9	9.7	25	26	12	4.5	2.5
13						5.4	11	19	22	12	4.5	2.6
14						7.1	10	14	18	10	4.5	2.4
15						8.2	10	13	17	8.6	4.5	2.5
16						14	10	11	15	7.3	4.2	2.5
17						13	8.2	10	14	7.0	3.8	2.5
18						9.7	8.2	10	13	7.3	3.6	2.4
19						9.3	8.2	9.3	14	7.6	3.8	1.5
20						9.3	8.2	8.2	24	8.3	4.2	1.1
21						6.8	7.5	7.1	26	8.6	4.0	.8
22						6.0	7.5	6.3	24	8.6	2.6	1.2
23						5.7	6.8	5.1	20	7.3	2.5	1.5
24						9.0	6.5	4.6	17	5.1	2.5	2.2
25						12	5.7	3.9	14	4.6	2.8	4.2
26						10	9.7	3.8	12	4.5	3.4	3.4
27						9.0	26	10	10	4.5	3.6	1.2
28						9.3	16	25	9.0	4.5	3.8	1.2
29						12	12	25	16	4.5	3.2	1.3
30						14	9.3	22	22	4.0	3.8	1.2
31						11	...	30	21	...	3.8	...
Total						237.6	258.6	349.8	994.7	300.7	127.8	65.2
Mean.						7.67	8.62	11.3	32.1	10.0	4.12	2.17
Max.						14	26	30	240	21	5.6	4.2
Min.						2.5	2.9	3.8	9.0	4.0	2.5	0.8
Acre-ft.						471	513	694	1970	596	253	129

Total run-off for period = 4,630 acre-feet.

Discharge of Spanish Creek Near Crestone, Colorado, for Year Ending Nov. 30, 1936

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1						2.2	4.8	3.5	43	11	2.8	1.4
2						2.8	3.3	2.8	42	9.0	2.8	1.3
3						4.5	2.5	2.5	40	15	2.8	1.2
4						5.9	2.4	2.4	39	12	2.6	1.4
5						6.2	2.4	2.3	71	9.0	2.6	1.3
6						4.5	2.5	2.2	38	7.5	2.6	1.2
7						2.5	3.0	2.0	20	6.7	2.6	1.3
8						2.0	3.8	2.4	14	6.3	2.5	1.3
9						2.2	3.8	3.8	11	5.9	2.7	1.2
10						2.2	3.8	7.7	10	5.7	2.6	1.4
11						2.2	3.1	21	11	5.7	2.5	1.4
12						2.8	3.1	21	11	5.5	2.4	1.4
13						4.5	3.8	11	9.6	4.9	2.3	1.4
14						5.5	3.5	7.0	8.5	4.3	2.6	1.4
15						8.4	4.0	5.9	7.5	3.7	2.6	1.4
16						9.4	3.3	4.0	7.0	3.3	2.4	1.5
17						8.0	3.0	4.0	6.3	3.0	2.3	1.6
18						5.5	2.8	4.8	5.9	2.9	2.2	1.5
19						6.6	2.8	4.3	6.1	2.7	2.2	1.4
20						7.3	2.6	4.0	14	2.6	2.1	1.4
21						5.2	2.6	3.5	13	2.4	2.1	1.4
22						4.0	2.8	3.1	11	2.3	2.0	1.2
23						5.5	3.0	2.6	9.3	2.0	2.0	1.3
24						7.7	2.8	2.5	9.0	1.9	1.9	1.4
25						7.0	2.5	2.3	8.3	1.9	2.0	1.4
26						5.8	4.5	2.2	7.5	2.1	2.0	1.4
27						5.2	30	3.3	7.0	2.2	1.9	1.4
28						5.9	11	42	7.2	2.3	1.9	1.4
29						7.7	6.6	18	8.5	2.5	1.6	1.3
30						7.3	4.3	16	12	2.7	1.6	1.3
31						5.2	...	21	13	1.6	1.6	...
Total						161.7	134.4	235.1	520.7	149.0	70.8	40.9
Mean.						5.22	4.48	7.58	16.8	4.97	2.28	1.36
Max.						9.4	30	42	71	15	2.8	1.6
Min.						2.0	2.4	2.0	5.9	1.9	1.6	1.2
Acre-ft.						321	266	466	1030	296	140	81

Total run-off for period = 2,600 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

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Discharge of Cottonwood Creek Near Crestone, Colorado, for Year Ending Nov. 30, 1936

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1.....	7.8	11	4.7	17	19	5.9	4.5
2.....	7.8	8.3	4.0	18	16	6.1	3.9
3.....	11	6.3	3.6	19	26	6.1	3.1
4.....	12	6.9	3.6	21	21	5.4	4.0
5.....	12	7.2	3.6	31	17	5.0	3.9
6.....	8.6	7.2	3.3	85	15	4.8	3.7
7.....	4.3	7.8	3.6	34	13	4.7	3.7
8.....	3.0	9.3	4.0	24	12	4.8	3.6
9.....	2.9	9.5	6.3	18	11	4.8	3.2
10.....	2.3	8.8	10	15	11	4.5	3.1
11.....	2.6	7.8	18	16	11	4.4	3.1
12.....	5.4	8.1	22	17	12	4.2	2.9
13.....	8.6	8.1	14	15	11	4.0	3.1
14.....	11	8.1	11	13	9.6	4.0	3.1
15.....	13	8.6	9.0	12	8.6	4.0	3.2
16.....	15	8.3	7.6	11	7.7	4.0	3.4
17.....	13	7.6	6.5	11	7.4	4.0	3.4
18.....	11	7.4	6.1	12	7.4	4.0	3.2
19.....	12	7.2	5.4	15	7.2	4.2	3.2
20.....	13	6.5	5.2	42	6.8	4.4	3.2
21.....	11	5.6	4.3	34	6.3	4.0	3.2
22.....	9.8	6.5	3.6	29	5.9	3.7	3.4
23.....	11	8.1	3.2	22	5.4	3.9	3.1
24.....	14	6.9	2.9	19	5.0	3.6	3.2
25.....	12	6.3	2.8	15	5.0	3.4	3.1
26.....	11	7.4	2.6	14	5.0	3.4	3.1
27.....	12	14	5.6	12	5.2	3.1	3.2
28.....	11	8.1	3.4	12	5.9	3.1	3.1
29.....	13	6.5	2.0	16	6.3	3.4	3.1
30.....	12	5.2	2.1	24	6.5	4.0	3.1
31.....	11	19	22	22	4.4	3.1	.....
Total						304.1	234.6	270.5	665	306.2	133.3	100.1
Mean						9.81	7.82	8.73	21.5	10.2	4.30	3.34
Max.						15	14	34	85	26	6.1	4.5
Min.						2.3	5.2	2.6	11	5.0	3.1	2.9
Acre-ft.						603	465	537	1320	607	264	199

Total run-off for period = 4,000 acre-feet.

Discharge of Deadman Creek Near Crestone, Colorado, for Year Ending Nov. 30, 1936

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1.....	*8	11	8.4	25	25	6	6
2.....	*9	8.4	7.0	28	24	8	5
3.....	*12	6.6	5.5	30	24	7	5
4.....	*17	6.6	4.7	29	23	8	5
5.....	*18	6.6	4.3	36	20	7	4.5
6.....	15	6.6	4.0	37	18	7	5
7.....	12	6.6	3.6	37	18	6	5
8.....	10	7.0	4.3	33	18	6	5
9.....	8.8	7.0	5.9	30	18	6	5
10.....	7.0	7.5	6.2	26	16	6	5
11.....	7.0	6.6	15	26	16	6	5
12.....	10	5.7	26	25	16	6	4.5
13.....	15	5.7	21	22	15	6	4.5
14.....	17	5.3	16	21	15	7	4.5
15.....	19	5.7	12	16	14	7	4.0
16.....	22	5.7	11	15	14	7	4.0
17.....	20	4.8	10	15	13	5	4.0
18.....	16	4.1	11	16	11	5	4.0
19.....	16	4.1	10	18	9	5	4.0
20.....	16	3.8	11	35	7	4.5	4.0
21.....	14	3.1	9.7	33	6	4.5	3.5
22.....	12	3.1	8.8	28	5	4.0	3.5
23.....	12	7.0	7.4	24	6	4.0	3.5
24.....	16	5.9	6.6	22	6	4.5	2.5
25.....	15	5.1	6.2	20	6	4.5	3.0
26.....	14	5.1	5.9	18	6	5	3.0
27.....	13	8.8	10	16	5	6	3.0
28.....	13	12	40	16	5	6	3.0
29.....	13	12	29	20	5	5	3.0
30.....	14	9.2	28	27	5	6	3.0
31.....	12	12	26	26	6	6	3.0
Total						422.8	196.7	374.5	770	389	181.0	124.0
Mean						13.6	6.56	12.1	24.8	13.0	5.84	4.13
Max.						22	12	40	37	25	8	6
Min.						7.0	3.1	3.6	15	5	4.0	2.5
Acre-ft.						839	390	743	1530	772	359	246

Total run-off for period = 4,880 acre-feet.

*Estimated.

**Discharge of Arena Creek (Sand Creek) Near Crestone, Colorado, for
Year Ending Nov. 30, 1936**

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1....	16	33	11	39	49	24	33
2....	18	33	10	56	43	23	18
3....	30	26	8.5	62	59	20	21
4....	45	27	8.1	69	53	12	22
5....	52	24	7.6	122	44	12	14
6....	48	24	7.3	175	39	18	14
7....	39	24	7.2	123	35	12	12
8....	31	25	8.9	86	33	11	13
9....	26	25	11	76	29	11	12
10....	22	25	9.0	57	29	11	11
11....	20	24	22	45	28	11	11
12....	25	24	30	38	28	12	11
13....	36	24	21	32	26	14	11
14....	50	22	18	28	24	14	11
15....	64	20	18	24	22	12	11
16....	73	19	17	25	22	10	12
17....	64	17	15	23	20	10	12
18....	58	17	15	25	19	10	12
19....	60	14	12	38	22	10	12
20....	60	14	22	101	17	16	12
21....	58	12	15	94	13	16	12
22....	50	13	11	82	13	16	12
23....	48	15	9.6	60	12	12	14
24....	53	13	9.3	48	12	12	9
25....	50	11	9.0	40	11	12	8
26....	46	9.1	9.0	35	12	21	7
27....	44	13	10	32	12	19	7
28....	42	18	9.9	34	12	15	7
29....	47	14	4.4	40	12	15	7
30....	47	12	4.7	56	16	22	7
31....	41	.....	37	52	.....	35	.....
Total	1363	597.1	578.5	1817	766	468	375
Mean.	44.0	19.9	18.7	58.6	25.5	15.1	12.5
Max.	73	39	99	175	59	35	33
Min.	16	9.1	7.2	23	11	10	7
Acre-ft.	2700	1180	1150	3600	1520	928	744

Total run-off for period=11,820 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

COLORADO RIVER BASIN

COLORADO RIVER NEAR GRAND LAKE, COLORADO

Location—Water stage recorder in Sec. 13, T. 3 N., R. 76 W., 3 miles south of Grand Lake, about 1,500 feet below highway crossing.

Nearest Tributary—Grand Lake Outlet, enters one-half mile downstream.

Drainage Area—101 square miles.

Records Available—August, 1904, to September, 1909; October, 1910, to September 30, 1918; May 11, 1934, to September 30, 1936.

Maximum discharge observed during period 1904-9, 1910-18, 1934-36; 1,840 second-feet, June 15, 16, 17, 1918. Gage height, 7.00 feet former site and datum.

Maximum Discharge—Year 1935; 914 second feet June 16, 1935. Gage height, 5.18 feet.

Maximum Discharge—Year 1936; 666 second-feet June 1, 1936. Gage height, 4.50 feet.

Accuracy—Records considered good except those for estimated periods, November 19-22, 25, December 9, December 22, 23, 26, December 30, 1934, to March 30, 1935; March 25, April 7, 9-11, 1935, and October 20 to April 15, 1936, which were computed on basis of gage heights, temperature records, and 6 discharge measurements, which are fair. May 10-13 computed by comparison with Colorado River near Granby.

Diversions for irrigation and trans-mountain diversions above station.

COLORADO RIVER NEAR GRANBY, COLORADO

Location—Water stage recorder in Sec. 22, T. 2 N., R. 76 W., 4 miles northeast of Granby and $1\frac{1}{2}$ miles above mouth of Willow Creek.

Drainage Area—322 square miles.

Records Available—June, 1908, to September, 1911; May 12, 1934, to September 30, 1936.

Maximum discharge observed during period 1908-11, 1934-36, 4,100 second feet, June 20, 1909. Gage height, 5.50 feet (former datum).

Maximum Discharge—Year 1935; 3,370 second feet June 16, 1935. Gage height, 4.71 feet.

Maximum Discharge—Year 1936; 2,640 second feet June 1, 1936. Gage height, 4.34 feet.

Accuracy—Records considered excellent except for period November 28 to April 14, 1935, and November 10-16, November 23 to April 17, 1936, which were computed on basis of five discharge measurements, weather records and gage heights, and are fair.

Diversions for irrigation and trans-mountain diversions above station.

COLORADO RIVER NEAR HOT SULPHUR SPRINGS, COLORADO

Location—Water stage recorder in Sec. 1, T. 1 N., R. 78 W., 1 mile east of Hot Sulphur Springs at Thompson's ranch.

Nearest Tributary—Beaver Creek enters 3 miles below station.

Drainage Area—782 square miles at site used since September 19, 1930. Altitude, 7,680 feet above mean sea level.

Records Available—July, 1904, to September, 1909; September, 1910 to September, 1924; October, 1925, to September 30, 1936. Chain gage prior to September 19, 1930, 1½ miles downstream from present site. Records comparable.

Maximum discharge observed during period 1904-9, 1910-24, 1925-36, 10,300 second-feet (former site and datum), June 15, 1921. Gage height, 8.7 feet.

Maximum Discharge—Year 1935; 5,620 second-feet June 16, 1935. Gage height, 5.06 feet.

Maximum Discharge—Year 1936; 4,340 second-feet June 1, 1936. Gage height 4.26 feet.

Accuracy—Records considered excellent except for ice effect period, November 30 to April 11, 1935, and November 10, 13-15, 17, 19, 21, 25-28, November 30 to April 15, 1936, which were computed on basis of four and five discharge measurements and temperature records, and are fair.

Diversions for irrigation and trans-mountain diversion above station.

COLORADO RIVER AT GLENWOOD SPRINGS, COLORADO

Location—Water stage recorder in Sec. 9, T. 6 S., R. 89 W., at Glenwood Springs, opposite D. & R. G. W. R. R. depot, one-half mile above mouth of Roaring Fork.

Drainage Area—4,560 square miles. Zero of gage is 5,720.71 feet above mean sea level.

Records Available—May 12, 1899, to September 30, 1936.

Maximum discharge observed during period 1899-1936, 30,100 second-feet, June 14, 15, 1918. Gage height, 12.55 feet.

Maximum Discharge—Year 1935; 21,300 second-feet June 16, 1935. Gage height, 10.48 feet.

Maximum Discharge—Year 1936; 16,900 second-feet June 1, 1936. Gage height, 9.49 feet.

Accuracy—Records considered good.

Diversions for irrigation and trans-mountain diversion above station. During low-water period flow is regulated by Shoshone Power Plant, 6 miles upstream.

COLORADO RIVER NEAR CAMEO, COLORADO

Location—Water stage recorder in Sec. 6, T. 10 S., R. 97 W., 6.7 miles northeast of Cameo and 3.4 miles above mouth of Plateau Creek.

Drainage Area—8,055 square miles.

Records Available—October, 1933, to September 30, 1936.

Maximum discharge observed during period 1933-36, 36,000 second-feet, June 16, 1935. Gage height, 10.91 feet.

Maximum Discharge—Year 1935; 36,000 second-feet June 16, 1935. Gage height, 10.91 feet.

Maximum Discharge—Year 1936; 26,500 second-feet June 1, 1936. Gage height, 9.72 feet.

Accuracy—Records considered good. Discharge estimated October 1-9, December 6-17, 1934; January 2-12, 23, 27, 1935; December 16 to February 19, 1936, and September 22-30; computed on basis combined flow Colorado River and Roaring Fork at Glenwood Springs.

Diversions for irrigation above station.

COLORADO RIVER NEAR CISCO, UTAH

Location—Water stage recorder in NW $\frac{1}{4}$ Sec. 17, T. 23 S., R. 24 E., Salt Lake Meridian, 1 mile below mouth of Dolores River and 11 miles south of Cisco.

Drainage Area—24,100 square miles. Altitude, 4,088 feet above mean sea level.

Records Available—November, 1914, to September, 1917; October, 1922, to September 30, 1936.

Maximum discharge observed during period 1914-17, 1922-36, 76,800 second-feet, June 19, 1917. Gage height, 19.7 feet.

Maximum Discharge—Year 1935; 54,600 second-feet June 16, 1935. Gage height, 16.0 feet.

Maximum Discharge—Year 1936; 39,200 second-feet May 7, 1936. Gage height, 12.6 feet.

Accuracy—Records considered excellent. Discharge estimated December 4-6, 1934, and for period of ice effect, January 2 to February 11, 1936, which were computed on basis of two discharge measurements, gage heights, weather reports and records for Green River, Utah, and are fair.

Diversions for irrigation above station.

ARAPAHOE CREEK BELOW MONARCH LAKE, COLORADO

Location—Water stage recorder in SE $\frac{1}{4}$ Sec. 15, T. 2 N., R. 75 W., 700 feet below mouth of Roaring Fork and 10 miles northwest of Granby.

Drainage Area—59 square miles. Zero of gage is 8,244.30 feet above mean sea level.

Records Available—June, 1935, to September 30, 1936.

Maximum discharge observed during period 1935-36, 1,310 second-feet, June 16, 1935. Gage height, 4.13 feet.

Maximum Discharge—Year 1935; 1,310 second feet June 16, 1935. Gage height, 4.13 feet.

Maximum Discharge—Year 1936; 887 second-feet May 29, 1936. Gage height, 3.18 feet.

Accuracy—Records considered excellent June to September, 1935, except for June 1, 2, which were estimated, and April 14 to August, 1936; records good, October, 1935, to March, 1936, and September, 1936, except those for November 3, 26, 1935, and November 29, 1935, to April 13, 1936, which are fair, and were computed on basis of four discharge measurements and weather records.

Small diversions for irrigation above station. Flow partly regulated by Monarch Lake. Several second-feet diverted around station by power canal during summer.

WILLOW CREEK NEAR GRANBY, COLORADO

Location—Water stage recorder in NW $\frac{1}{4}$ Sec. 34, T. 3 N., R. 77 W., at highway bridge, 7 miles northwest of Granby.

Nearest Tributary—Gold Creek enters 100 feet above station.

Drainage Area—105 square miles. Zero of gage is 8,240.99 feet above mean sea level.

Records Available—April, 1935, to September 30, 1936.

Maximum discharge observed during period 1935-6, 680 second-feet, May 16, 1936. Gage height, 3.70 feet.

Maximum Discharge—Year 1935; 578 second-feet June 15, 1935. Gage height, 2.76 feet.

Maximum Discharge—Year 1936; 680 second-feet May 16, 1936. Gage height, 3.70 feet.

Accuracy—Records considered excellent June 1 to September 30, 1935; fair April 26 to May 31, and poor April 1-26 (estimated), and excellent for 1936 except for ice effect period October 24 to April 27, 1936, which are fair and were computed on basis of three discharge measurements and weather records.

Diversions for irrigation of hay meadows above station.

FRASER RIVER ABOVE WEST PORTAL, COLORADO

Location—Water stage recorder in NE $\frac{1}{4}$ Sec. 15, T. 2 S., R. 75 W., 100 yards below mouth of Jim Creek and 1 mile above West Portal.

Drainage Area—22.1 square miles.

Records Available—June, 1907, to October, 1909; August, 1934, to September 30, 1936.

Maximum discharge observed during period 1934-36, 393 second feet, June 15, 1935. Gage height, 2.27 feet.

Maximum Discharge—Year 1935; 393 second-feet, June 15, 1935. Gage height, 2.27 feet.

Maximum Discharge—Year 1936; 227 second-feet May 30, 1936. Gage height, 2.04 feet.

Accuracy—Records considered good except those below 50 second-feet, which are fair, and December 1 to March 20, 1935; November 12-18, November 30 to April 14, 1936, which are fair and were computed on basis of five discharge measurements and weather records.

Trans-mountain diversion by Pioneer Bore of the Moffat Tunnel above station. Diversion began June 9, 1936. The combined flow of this diversion and Fraser River is comparable with records prior to June 9, 1936.

FRASER RIVER NEAR WEST PORTAL (ARROW), COLORADO

Location—Water stage recorder in NE $\frac{1}{4}$ Sec. 4, T. 2 S., R. 75 W., 1 $\frac{1}{2}$ miles northwest of West Portal.

Drainage Area—28 square miles. Altitude, 9,500 feet above mean sea level.

Records Available—September 23, 1910, to September 30, 1936.

Maximum discharge observed during period 1910-36, 820 second-feet, June 13, 1918. Gage height, 2.9 feet.

Maximum Discharge—Year 1935; 375 second-feet June 16, 1935. Gage height, 2.32 feet.

Maximum Discharge—Year 1936, 279 second-feet May 30, 1936. Gage height, 1.94 feet.

Accuracy—Records considered excellent except for period from January 17 to March 31, 1935, which are good; and for estimated periods November 27, 1934, to December 2, December 8, 9, 16, 19, 23, 25, 29, 30, January 2 to 16, 1935, and for periods of ice effect, computed on basis of three discharge measurements and weather records for November 8, 9, 12, 13, 16-20, 22-24, 1935, November 29 to December 5, December 10, 12, December 15, 1935, to January 10, 1936, January 19-21, January 27 to March 6, March 10-21, March 28 to April 3, April 11-27, 1936.

Trans-mountain diversions above station. The Pioneer Bore of the Moffat Tunnel has diverted water above this station since June 9, 1936. The combined flow of this diversion and Fraser River is comparable with records prior to June 9, 1936.

VASQUEZ CREEK NEAR WEST PORTAL, COLORADO

Location—Water stage recorder in NW $\frac{1}{4}$ Sec. 33, T. 1 S., R. 75 W., just below main highway, 2½ miles northwest of West Portal and one-fourth mile above mouth. Present gage is three-fourths mile downstream from site used 1907-9.

Drainage Area—27.8 square miles.

Records Available—June, 1907, to October 1909; August, 1934, to September 30, 1936.

Maximum discharge observed during period 1934-36, 396 second feet, June 15, 1935. Gage height, 2.64 feet.

Maximum Discharge—Year 1935; 396 second-feet June 15, 1935. Gage height, 2.64 feet.

Maximum Discharge—Year 1936; 273 second-feet May 30, 1936. Gage height, 2.27 feet.

Accuracy—Records considered good except those estimated for December 2, 1934, to March 21, 1935, on basis of three discharge measurements and temperature records, and those for periods of ice effect October 28, 29, 1935, November 4 to April 21, 1936, which are fair and were computed on basis of five discharge measurements, weather records and gage heights.

No diversions for irrigation above station.

ST. LOUIS CREEK NEAR FRASER, COLORADO

Location—Water stage recorder in See. 34, T. 1 S., R. 76 W., one-third mile below junction of East and West Branches and 4½ miles southwest of Fraser. In 1907-9 site maintained 2 miles upstream. Records not comparable.

Drainage Area—32.8 square miles.

Records Available—June, 1907, to September, 1909; August, 1934, to September 30, 1936.

Maximum discharge observed during period 1934-36, 353 second-feet, June 15, 1935. Gage height, 2.58 feet.

Maximum Discharge—Year 1935, 353 second-feet June 15, 1935. Gage height, 2.58 feet.

Maximum Discharge—Year 1936, 251 second-feet May 30, 1936. Gage height, 2.34 feet.

Accuracy—Records considered excellent except those estimated, which are fair, from November 21, 1934, to March 27, 1935, on basis of three discharge measurements and temperature records, and April 6-7, June 13-14, 16-26, by comparison with Fraser River

near West Portal and those estimated October 28, 29, 1935, November 5, 6, November 8 to April 12, 1936, which were computed on basis of five discharge measurements, gage heights and weather records.

No diversions for irrigation above station.

RANCH CREEK NEAR FRASER, COLORADO

Location—Water stage recorder in NE $\frac{1}{4}$ Sec. 22, T. 1 S., R. 75 W., 150 yards below junction of South Fork and Ranch Creeks and three miles east of Fraser at Arkall ranch.

Drainage Area—19.9 square miles.

Records Available—August, 1934, to September 30, 1936.

Maximum discharge observed during period, 299 second-feet, June 15, 1935. Gage height, 3.37 feet.

Maximum Discharge—Year 1935; 299 second-feet June 15, 1935. Gage height, 3.37 feet.

Maximum Discharge—Year 1936; 199 second-feet May 30, 1936. Gage height, 2.80 feet.

Accuracy—Records considered excellent except for those estimated November 27, 1934, to March 22, 1935, on basis of two discharge measurements and weather records, and June 18-26, estimated by comparative hydrograph of Fraser River, which are fair. Also estimated are records for October 28, 29, 31, 1935; November 1, 8, 9, 11-13, November 28 to December 6, December 19 to January 1, 1936; January 9 to April 10, which are fair, and were computed on basis of five discharge measurements, gage heights and weather records.

No diversions above station.

RANCH CHEEK NEAR TABERNASH, COLORADO

Location—Water stage recorder in Sec. 6, T. 1 S., R. 75 W., one-fourth mile above mouth of Meadow Creek and 1 $\frac{1}{2}$ miles east of Tabernash.

Drainage Area—50.7 square miles

Records Available—September, 1934, to September 30, 1936.

Maximum discharge observed during period 1934-36, 506 second-feet, June 15, 1935. Gage height, 4.40 feet.

Maximum Discharge—Year 1935; 506 second-feet June 15, 1935. Gage height, 4.40 feet.

Maximum Discharge—Year 1936, 428 second-feet May 27, 1936. Gage height, 4.10 feet.

Accuracy—Records considered excellent except those estimated, which are fair, for November 30, 1934, to April 17, 1935, on basis of three discharge measurements and weather records; May 20 to June 27, on basis of comparative hydrographs of Ranch Creek and Fraser River near West Portal, and for ice effect period, November 12, 1935, to May 12, 1936, computed on basis of five discharge measurements and weather records.

Diversions for irrigation above station.

MEADOW CREEK NEAR TABERNASH, COLORADO

Location—Water stage recorder in Sec. 15, T. 1 N., R. 75 W., five miles northeast of Tabernash.

Drainage Area—7.0 square miles.

Records Available—May 27 to September 30, 1936.

Maximum Discharge—Year 1936; 177 second-feet May 31, 1936. Gage height, 3.37 feet.

Accuracy—Records considered excellent for May 27 to July 5, and fair July 6 to September 30.

No diversions above station.

STRAWBERRY CREEK NEAR GRANBY, COLORADO

Location—Water stage recorder in SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 32, T. 2 N., R. 75 W., 0.6 miles below Little Strawberry Creek, 6 miles east of Granby.

Drainage Area—12.6 square miles.

Records Available—May 28 to September 30, 1936.

Maximum Discharge—Year 1936; 48 second-feet May 28, 1936. Gage height, 1.23 feet.

Accuracy—Records considered excellent.

Two diversions for irrigation above station.

WILLIAMS FORK RIVER BELOW STEELMAN CREEK, COLORADO

Location—Water stage recorder in Sec. 20, T. 3 S., R. 76 W., just below mouth of Steelman Creek and 7 miles southeast of Leal.

Drainage Area—16.3 square miles.

Records Available—June 23, 1933, to September 30, 1936.

Maximum discharge observed during period 1933-36, 332 second-feet, June 15, 1935. Gage height 2.45 feet.

Maximum Discharge—Year 1935; 332 second feet June 15, 1935. Gage height 2.45 feet.

Maximum Discharge—Year 1936; 254 second-feet May 30, 1936. Gage height, 2.17 feet.

Accuracy—Records considered good 1934-35, except those for period, December 1, 1934, to March 31, 1935, April 1, 2, 10, which are fair, and records considered excellent 1935-36, except those for period of ice effect, October 28, 1935, to May 6, 1936, and for June 7-13, which are good and were computed on basis of records for station near Leal.

No diversions above station.

WILLIAMS FORK RIVER NEAR LEAL, COLORADO

Location—Water stage recorder in Sec. 31, T. 2 S., R. 77 W., just below mouth of Kinney Creek and two miles north of Leal.

Drainage Area—84 square miles.

Records Available—June 19, 1933, to September 30, 1936.

Maximum discharge observed during period 1933-36, 1,330 second-feet, June 15, 1935. Gage height, 3.49 feet.

Maximum Discharge—Year 1935; 1,330 second-feet June 15, 1935. Gage height, 3.49 feet.

Maximum Discharge—Year 1936; 966 second-feet May 31, 1936. Gage height, 2.78 feet.

Accuracy—Records considered excellent except those for period January 19 to March 13, 1935; December 15-20, 1935; December 23 to January 11, 1936, which are good and were computed on basis of one discharge measurement and weather records.

Diversions for irrigation above station.

WILLIAMS FORK RIVER NEAR PARSHALL, COLORADO

Location—Water stage recorder in Sec. 1, T. 1 S., R. 79 W., just below highway bridge, 2½ miles above mouth of Battle Creek, and 4 miles south of Parshall.

Drainage Area—184 square miles.

Records Available—July, 1904, to September, 1924; June 19, 1933, to September 30, 1936.

Maximum discharge observed during period 1904-24, 1933-36, 2,750 second-feet, estimated, June 16, 1918.

Maximum Discharge—Year 1935; 1,460 second-feet June 16, 1935. Gage height, 4.00 feet.

Maximum Discharge—Year 1936; 1,100 second-feet May 31, 1936. Gage height, 3.42 feet.

Accuracy—Records considered excellent except those for estimated period from November 19, 1934, to March 28, 1935, and November 13, 1935, to April 7, 1936, which are good and were estimated on basis of four discharge measurements for each period, weather records, and comparison with Leal station.

Diversions for irrigation above station.

BLUE RIVER AT DILLON, COLORADO

Location—Water stage recorder in Sec. 18, T. 5 S., R. 77 W., on edge of Dillon, a short distance above the mouths of Snake River and Ten-Mile Creek.

Drainage Area—129 square miles. Zero of gage is 8,821.42 feet above mean sea level.

Records Available—October 15, 1910, to September 30, 1936.

Maximum discharge observed during period 1910-36, 1,180 second-feet, June 2, 1914. Gage height, 3.6 feet.

Maximum Discharge—Year 1935; 809 second-feet June 15, 1935. Gage height, 3.28 feet.

Maximum Discharge—Year 1936; 777 second-feet May 31, 1936. Gage height, 3.24 feet.

Accuracy—Records considered excellent except those for period November 2, 1934, to April 13, 1935, which were estimated on basis of three discharge measurements and weather records, and for November 13, 1935, to April 13, 1936, which are good and were computed on basis of five discharge measurements and weather records, and those estimated for August 2-5, September 20-25, 1936, which are fair.

Diversions for irrigation above station.

SNAKE RIVER AT DILLON, COLORADO

Location—Water stage recorder in Sec. 18, T. 5 S., R. 77 W., at highway bridge 100 yards above mouth of river at Dillon.

Drainage Area—92 square miles. Zero of gage is 8,820.54 feet above mean sea level.

Records Available—October 15, 1910, to September 30, 1919; December, 1929, to September 30, 1936.

Maximum discharge observed during period 1910-19, 1929-36; 1,200 second-feet, June 13, 1935. Gage height, 4.25 feet.

Maximum Discharge—Year 1935; 1,200 second-feet June 13, 1935. Gage height, 4.25 feet.

Maximum Discharge—Year 1936; 825 second-feet May 30, 1936. Gage height, 3.75 feet.

Accuracy—Records considered excellent except those estimated for period from November 10, 1934, to April 6, 1935, which were estimated on basis of three discharge measurements and weather records, and for November 5, 1935, November 12 to December 8, December 10, 12, 15-27, February 4-14, 1936, February 25, March 9-14, 16 computed on basis of two discharge measurements, gage heights and weather records, and those estimated for September 20-25, 1936, which are fair.

One diversion above station.

TEN MILE CREEK AT DILLON, COLORADO

Location—Water stage recorder in Sec. 18, T. 5 S., R. 77 W., at highway bridge 300 yards above mouth at Dillon.

Drainage Area—113 square miles. Zero of gage is 8,819.97 feet above mean sea level.

Records Available—October 15, 1910, to September 30, 1919; April, 1930, to September 30, 1936.

Maximum discharge observed during period 1910-19, 1930-36, 2,010 second-feet, June 1, 1933. Gage height, 5.82 feet.

Maximum Discharge—Year 1935; 1,350 second-feet June 11, 1935. Gage height, 5.60 feet.

Maximum Discharge—Year 1936; 1,170 second-feet May 30, 1936. Gage height, 5.29 feet.

Accuracy—Records considered excellent except those for period June 1-23, 1935, and those estimated November 11, 1934, to April 14, 1935, on basis of four discharge measurements and weather records, and from November 12 to April 13, 1936, computed on basis of five discharge measurements and weather records, and those estimated for September 20-25, which are fair.

Diversions for irrigation above station.

ROARING FORK RIVER AT ASPEN, COLORADO

Location—Water stage recorder in Sec. 7, T. 10 S., R. 84 W., at bridge near old power plant in Aspen, three-fourths mile above mouth of Hunter Creek. Prior to February 24, 1915, station located one-half mile upstream from present site; February 24, 1915, to October 5, 1935, station one-fourth mile downstream from present site. Records comparable.

Drainage Area—109 square miles.

Records Available—January 1, 1911, to September 30, 1921; April 24, 1932, to September 30, 1936.

Maximum discharge observed during period 1911-21, 1932-36, 3,170 second-feet, June 18, 1917. Gage height, 7.2 feet, former site and datum.

Maximum Discharge—Year 1935; 1,370 second-feet June 16, 1935. Gage height, 4.69 feet.

Maximum Discharge—Year 1936; 1,030 second-feet May 26, 1936. Gage height, 4.29 feet.

Accuracy—Records considered excellent except those for period of ice effect December 1-5, 1935, December 10, December 14 to February 16, 1936, which are good and were computed on basis of one discharge measurement, gage heights and weather records, and those for July 6-11, August 8-15, 18-29, September 6-14, computed on basis of records for station at Glenwood Springs.

Twin Lakes Trans-mountain Tunnel diverts water 15 miles above station to Arkansas River basin. The combination of this flow and Roaring Fork is comparable with records at this station prior to May 24, 1935. The Tunnel diversion began on May 24, 1935.

ROARING FORK RIVER AT GLENWOOD SPRINGS, COLORADO

Location—Water stage recorder in Sec. 9, T. 6 S., R. 89 W., 1,500 feet above mouth of river at Glenwood Springs.

Drainage Area—1,460 square miles. Zero of gage is 5,720.73 feet above mean sea level.

Records Available—April, 1906, to September, 1909; September, 1910, to September 30, 1936

Maximum discharge observed during period 1906-09, 1910-36, 17,600 second-feet, June 14, 1918, and June 14, 1921.

Maximum Discharge—Year 1935; 12,500 second-feet June 15, 1935. Gage height, 7.35 feet.

Maximum Discharge—Year 1936; 8,610 second-feet May 30, 1936. Gage height, 5.84 feet.

Accuracy—Records considered good except for discharge estimates January 5, 6, 23, 24, 1935, computed by comparison with temperature records.

Diversions for irrigation above station.

CRYSTAL RIVER NEAR REDSTONE, COLORADO

Location—Water stage recorder in NE $\frac{1}{4}$ Sec. 9, T. 9 S., R. 88 W., 75 feet below mouth of Nettle Creek and 7 miles below Redstone.

Drainage Area—197 square miles.

Records Available—May 12, 1935, to September 30, 1936.

Maximum discharge observed during period 1935-36, 2,980 second-feet, June 15, 1935. Gage height, 4.80 feet.

Maximum Discharge—Year 1935; 2,980 second-feet June 15, 1935. Gage height, 4.80 feet.

Maximum Discharge—Year 1936; 2,390 second-feet, May 27, 1936. Gage height, 4.22 feet.

Accuracy—Records considered excellent except those estimated for period June 1-10, 1935, and those for January 19-21, 1936, which are fair.

Diversions for irrigation above station.

WILLOW CREEK NEAR RAVEN, COLORADO

Location—Water stage recorder in Sec. 13, T. 9 S., R. 91 W., 350 yards above mouth and 15 miles south of Raven.

Drainage Area—12 square miles.

Records Available—May 20, 1935, to September 30, 1936.

Maximum discharge observed during period 1935-36, 142 second-feet May 4, 1936. Gage height, 3.10 feet.

Maximum Discharge—Year 1935; 140 second-feet May 26, 1935. Gage height, 3.06 feet.

Maximum Discharge—Year 1936; 142 second-feet May 4, 1936. Gage height, 3.10 feet.

Accuracy—Records considered good except for those estimated for period June 3-9, September 10-12, 1935, November 12-30, and April 1-16, 1936, which are fair. No records December 1 to March 31, 1936.

No diversions above station.

ROAN CREEK NEAR HIGHMORE, COLORADO

Location—Water stage recorder in Sec. 26, T. 6 S., R. 100 W., at Simmons ranch, 4 miles above mouth of Carr Creek, and 4 miles west of Highmore.

Records Available—May 16, 1935, to September 30, 1936.

Maximum Discharge—Year 1935; 120 second-feet May 26, 1935. Gage height, 1.92 feet.

Maximum Discharge—Year 1936; 47 second-feet June 26, 1936. Gage height, 1.37 feet.

Accuracy—Records considered good above 20 second-feet and fair below. Discharge estimated July 25 to September 30, 1935, on basis comparative hydrograph of Carr Creek. No record October 1, October 3, 1935, to March 8, 1936.

Diversions for irrigation above station.

CARR CREEK NEAR HIGHMORE, COLORADO

Location—Water stage recorder in Sec. 30, T. 5 S., R. 99 W., at Altenbernd ranch, 8 miles above mouth and $7\frac{1}{2}$ miles northwest of Highmore (Carr Creek School).

Records Available—May 15, 1935, to September 30, 1936.

Maximum discharge observed during period 1935-36, 143 second-feet, May 26, 1935. Gage height, 1.90 feet.

Maximum Discharge—Year 1935; 143 second-feet May 26, 1935. Gage height, 1.90 feet.

Maximum Discharge—Year 1936; 52 second-feet April 25, 1936. Gage height, 1.28 feet.

Accuracy—Records considered good except for period August 15 to September 30, 1935, and January 14 to March 1, 1936, which are fair. Computed on basis of weather records.

Diversions for irrigation above station.

PLATEAU CREEK NEAR COLLBRAN, COLORADO

Location—Water stage recorder in NW $\frac{1}{4}$ See. 24, T. 9 S., R. 94 W., 7 miles east of Collbran.

Drainage Area—88 square miles.

Records Available—August 20, 1921, to September 30, 1936.

Maximum discharge observed during period 1921-36, 2,800 second-feet, May 28, 1922. Gage height, 6.72 feet, former datum.

Maximum Discharge—Year 1935; 886 second feet June 6, 1935. Gage height, 3.86 feet.

Maximum Discharge—Year 1936; 1,150 second-feet May 17, 1936. Gage height, 3.96 feet.

Accuracy—Records considered good except those estimated November 24, 1934, to March 26, 1935, on basis of one discharge measurement and weather records, and November 4, 6, 20-22, 1935, November 29 to February 29, 1936, March 8, 9, 17, 18, April 6, 7, 1936, computed on basis of three discharge measurements and weather records and those for October 1-21, which are fair.

Five small diversions for irrigation above station

PLATEAU CREEK NEAR CAMEO, COLORADO

Location—Water stage recorder in SW $\frac{1}{4}$ Sec. 18, T. 10 S., R. 97 W., 1.1 miles above mouth and four miles northeast of Cameo.

Drainage Area—604 square miles.

Records Available—April 26 to September 30, 1936.

Maximum Discharge—Year 1936; 1,540 second-feet May 6, 1936. Gage height, 4.40 feet. (Curve extended above 800 second-feet.)

Accuracy—Records considered good.

Diversions for irrigation above station.

BUZZARD CREEK NEAR HEIBERGER, COLORADO

Location—Water stage recorder in NE $\frac{1}{4}$ Sec. 11, T. 9 S., R. 93 W., 1.1 miles below Hightower ranger station and 3 miles east of Heiberger.

Drainage Area—76.5 square miles.

Records Available—April 29 to September 30, 1936.

Maximum Discharge—Year 1936; 280 second-feet May 16, 1936. Gage height, 2.24 feet.

Accuracy—Records considered good. Discharge for May 1-12, 26, May 28 to June 2, June 4-8, 11-15, computed on basis of records for station near Collbran.

One diversion for irrigation to West Divide Creek above station.

BUZZARD CREEK NEAR COLBRAN, COLORADO

Location—Water stage recorder in Sec. 14, T. 9 S., R. 94 W., 7 miles east of Colbran and one-half mile above mouth of Brush Creek.

Drainage Area—139 square miles.

Records Available—August 18, 1921, to September 30, 1936.

Maximum discharge observed during period 1921-36, 1,270 second feet May 8, 1922. Gage height, 7.8 feet. (Previous data published not maximum.)

Maximum Discharge—Year 1935; 489 second-feet May 26, 1935. Gage height, 5.07 feet.

Maximum Discharge—Year 1936; 476 second-feet May 5, 1936. Gage height 5.00 feet.

Accuracy—Records considered excellent except those for period August 1 to September 30, 1935, which are good, and those estimated November 25, 1934, to March 27, 1935, which are fair and were computed on basis of three discharge measurements and weather records. Records for 1935 to 1936 fair, October to March. Good from April to September. Discharge for ice period

November 5, 1935, to March 4, 1936, March 17, 18 computed on basis of two discharge measurements and weather records, and for July 7-11, September 20-23 on basis of records for station near Heiberger.

Diversions for irrigation above station.

TAYLOR RIVER AT ALMONT, COLORADO

Location—Water stage recorder in Sec. 22, T. 51 N., R. 1 E., at highway bridge at Almont, 800 feet above junction with East River.

Drainage Area—440 square miles. Zero of gage is 8,011.98 feet above mean sea level.

Records Available—July 27, 1910, to September 30, 1936.

Maximum discharge observed during period 1910-36, 3,760 second-feet, June 9, 1920. Gage height, 5.00 feet.

Maximum Discharge—Year 1935; 2,390 second-feet June 16, 1935. Gage height, 5.04 feet.

Maximum Discharge—Year 1936; 2,020 second feet May 26, 1936. Gage height, 4.28 feet.

Accuracy—Records considered good except those estimated for period from December 1, 1934, to March 24, 1935, which are fair and for period of ice effect December 17-27, 1935, January 13, 14, 1936, January 18 to February 16, February 18 to March 5, computed on basis of two discharge measurements and weather records.

Diversions for irrigation above station.

EAST RIVER AT ALMONT, COLORADO

Location—Water stage recorder in Sec. 22, T. 51 N., R. 1 E., 400 feet above mouth at Almont.

Drainage Area—295 square miles.

Records available April to October, 1905; July, 1910, to April, 1922; October, 1934, to September 30, 1936.

Maximum discharge observed during period 1905, 1910-22, 1934-36, about 6,500 second-feet, June 15, 1921. Gage height, 6.6 feet, former site and datum.

Maximum Discharge—Year 1935; 2,840 second-feet June 14, 1935. Gage height, 5.25 feet.

Maximum Discharge—Year 1936; 2,830 second-feet May 6, 1936. Gage height, 5.12 feet.

Accuracy—Records considered good. No record December 1, 1934, to March 17, 1935. Discharge for ice effect period December 16, 1935, to February 15, 1936, computed on basis of one discharge measurement, gage heights and weather records.

Diversions for irrigation above station.

HENSON CREEK AT LAKE CITY, COLORADO

Location—Water stage recorder in Sec. 33, T. 44 N., R. 4 W., 1 mile southwest of Lake City.

Drainage Area—82 square miles.

Records Available—December, 1928, to July, 1930; October, 1931, to September 30, 1936; April, 1918, to September, 1919, at site one mile upstream.

Maximum discharge observed during period 1918-19, 1928-30, 1931-36, 2,510 second-feet, July 25, 1929.

Maximum Discharge—Year 1935; 995 second-feet June 14, 1935. Gage height, 4.15 feet.

Maximum Discharge—Year 1936, 786 second-feet May 25, 1936. Gage height, 3.17 feet.

Accuracy—Records considered good for 1934-35 except for period November 3 to April 30, 1935, which are fair and were estimated on basis of five discharge measurements and weather records. Records considered excellent for 1935-36, except those for period November 11 to April 18, 1936, which are fair and were computed on basis of 11 discharge measurements and weather records.

No diversions above station.

LAKE FORK AT LAKE CITY, COLORADO

Location—Water stage recorder in Sec. 34, T. 44 N., R. 4 W., at Lake City just above Wade Gulch. Henson Creek enters one-half mile downstream.

Drainage Area—123 square miles.

Records Available—April, 1918, to September, 1924; December, 1928, to July, 1930; October, 1931, to September 30, 1936.

Maximum discharge observed during period 1918-24, 1928-30, 1931-36, 1,560 second-feet, June 12, 15, 1921.

Maximum Discharge—Year 1935; 1,120 second-feet June 15, 1935. Gage height, 3.65 feet.

Maximum Discharge—Year 1936; 605 second-feet May 26, 1936. Gage height, 2.69 feet.

Accuracy—Records considered good for 1934-35, except for those estimated for November 6 to April 30, 1935, on basis of five discharge measurements and weather records. Records excellent for 1935-36, except those for period of ice effect November 11 to April 18, 1936, which are good and were computed on basis of 11 discharge measurements and weather records.

Diversions for storage and irrigation above station. Natural regulation by Lake San Cristobal, 4 miles upstream.

EAST MUDDY CREEK NEAR RAGGED MOUNTAIN, COLORADO

Location—Water stage recorder in Sec. 13, T. 11 S., R. 90 W., 250 yards above mouth of Drift Creek and 1½ miles below Ragged Mountain.

Drainage Area—80 square miles.

Records Available—May 24, 1934, to September 30, 1936.
(Discontinued.)

Maximum Discharge—Year 1935; 612 second-feet May 27, 1935. Gage height, 2.08 feet.

Maximum Discharge—Year 1936; 826 second-feet May 5, 1936. Gage height, 2.32 feet.

Accuracy—Records considered good except those estimated for July 11-26, September 2-30, 1935, which are fair and those for periods of shifting control October 1 to November 19, 1935, September 6 to 30, 1936, and those estimated for May 13-18, 20, 1936, which are fair. No record November 20, 1935, to March 23, 1936.

Diversions for irrigation above station.

EAST MUDDY CREEK NEAR BARDINE, COLORADO

Location—Water stage recorder in Sec. 17, T. 12 S., R. 89 W., one-fourth of a mile below Spring Creek and 6½ miles above Bardine.

Drainage Area—136 square miles.

Records Available—May 18, 1935, to September 30, 1936.

Maximum discharge observed during period 1935-36, 824 second-feet, May 5, 1936. Gage height, 2.12 feet.

Maximum Discharge—Year 1935; 613 second-feet May 25, 1935. Gage height, 1.92 feet.

Maximum Discharge—Year 1936; 824 second-feet May 5, 1936. Gage height, 2.12 feet.

Accuracy—Records considered good except those estimated June 2-7, 1935, which are fair. Discharge for November 20-24, 27-30, 1935, computed on basis of gage heights and weather records, and discharge for August 10-13, 22-29, computed on basis of records for Ragged Mountain station.

Diversions for irrigation above station.

NORTH FORK OF GUNNISON RIVER NEAR SOMERSET, COLORADO

Location—Water stage recorder in Sec. 10, T. 13 S., R. 90 W., 2 miles east of Somerset.

Drainage Area—521 square miles.

Records Available—March 30, 1934, to September 30, 1936.

Maximum discharge observed during period 1934-36, 3,780 second-feet May 6, 1936. Gage height, 5.15 feet.

Maximum Discharge—Year 1935; 3,120 second-feet June 13, 1935. Gage height, 4.67 feet.

Maximum Discharge—Year 1936; 3,780 second feet May 6, 1936. Gage height, 5.15 feet.

Accuracy—Records considered good for 1934-35, and excellent for 1935-36, except those for periods of ice effect December 1, 1935, to January 10, January 13, 14, 18-27, January 30 to February 2, February 5-11, 15-23, computed on basis of one discharge measurement, gage heights and weather records. Those estimated for March 1 to April 30 and September 19-24, all of which are good.

Diversions for irrigation above station.

GUNNISON RIVER NEAR GRAND JUNCTION, COLORADO

Location—Water stage recorder in NW $\frac{1}{4}$ Sec. 35, T. 1 S., R. 1 W., Ute Meridian, one-half mile below Redlands Power Diver-
sion Dam, and two miles above mouth.

Drainage Area—8,020 square miles.

Records Available—May, 1897, to September, 1899; April, 1917, to September, 1930; January, 1934, to September 30, 1936.

Maximum discharge observed during period 1917-30, 1933-36;
35,700 second-feet, May 23, 1920. Gage height, 14.95 feet.

Maximum Discharge—Year 1935; 16,400 second-feet June 15, 1935.

Maximum Discharge—Year 1936; 15,300 second feet May 7, 1936.

Accuracy—Records considered good. Discharge estimated January 6-8, 1935, January 24-27, when stage discharge relation was effected by ice and for period December 28, 1935, to February 10, 1936, computed on basis of one discharge measurement, gage heights and weather records.

Diversions for irrigation above station. Flows recorded are combination of River discharge and Power Canal diversions.

SURFACE CREEK AT CEDAREDGE, COLORADO

Location—Water stage recorder in Sec. 20, T. 13 S., R. 94 W., at Cedaredge on 32-ft. weir.

Drainage Area—43 square miles.

Records Available—May 16, 1917, to September 30, 1936.

Maximum discharge observed during period 1917-36; 715 sec-
ond-feet, May 24, 1920. Gage height, 1.95 feet.

Maximum Discharge—Year 1935; 189 second-feet May 25, 1935. Gage height, 1.24 feet.

Maximum Discharge—Year 1936; 273 second-feet May 4, 1936. Gage height, 1.34 feet.

Accuracy—Records considered excellent except those esti-
mated for period November 9, 1934, to March 24, 1935, which are
fair and for period of ice effect November 27, 1935, to March 19,
1936, computed on basis of 2 discharge measurements and weather

records. Those estimated October 1-26, 1935, November 11-21, March 27, 28, 1936, which are fair.

Diversions for storage and irrigation above station. Flow regulated by numerous reservoirs. Water brought into this drainage basin from adjacent streams.

UNCOMPAHGRE RIVER AT COLONA, COLORADO

Location—Water stage recorder in NW $\frac{1}{4}$ Sec. 17, T. 47 N., R. 8 W., $\frac{1}{4}$ mile east of Colona.

Drainage Area—437 square miles.

Records Available—April, 1917, to September 30, 1936. April, 1917, to November, 1934. Station at site 3 miles upstream. Records fairly comparable.

Maximum discharge observed during period 1917-36; 4,080 second-feet, June 13, 14, 1921.

Maximum Discharge—Year 1935; 1,750 second-feet June 14, 1935. Gage height, 3.67 feet.

Maximum Discharge—Year 1936; 1,130 second-feet May 29, 1936. Gage height, 3.34 feet.

Accuracy—Records considered fair for 1934-35. No record December 1 to March 11, 1935. Discharge for October and November, 1934, furnished by Uncompahgre Valley Water Users Association for station 3 miles upstream. Records considered good for 1935-36, except for period of ice effect December 15 to March 6, 1936, which are fair and were computed on basis of 2 discharge measurements and weather records; gage heights and some discharge measurements furnished by Water Users Association.

Diversions for irrigation above station.

KANNAH CREEK NEAR WHITEWATER, COLORADO

Location—Water stage recorder in Sec. 34, T. 12 S., R. 97 W., 17 miles east of Whitewater and $\frac{1}{4}$ mile below Grand Junction Water Works intake. Prior to October 14, 1935, station located 300 feet upstream.

Drainage Area—55 square miles.

Records Available—October 15, 1917, to September 30, 1921, August 17, 1922, to September 30, 1936. Flow diverted by intake not included in record since 1930.

Maximum discharge observed during period, combined flow, 1917-21, 1922-36; 1,630 second-feet, June 6, 1921. Gage height, 4.5 feet.

Maximum discharge, combined flow, year 1935; 1,920 second-feet June 6, 1935. Gage height, 3.82 feet.

Maximum discharge, combined flow, year 1936; 440 second-feet May 16, 1936. Gage height, 1.94 feet.

Accuracy—Records considered good for 1934-35 except those for estimated period November 26 to March 18, 1935, which are fair. Records considered excellent for 1935-36, except those for ice period November 28-30, 1935, December 2 to February 15, 1936, which are fair and were computed on basis of one discharge measurement and weather records.

Diversions for storage and domestic use above station.

DOLORES RIVER AT DOLORES, COLORADO

Location—Water stage recorder in Sec. 9, T. 37 N., R. 15 W., in Dolores 200 feet above highway bridge and $\frac{1}{4}$ mile above Lost Canon Creek.

Drainage Area—508 square miles. Altitude: 6,954 feet above mean sea level.

Records Available—June, 1895, to October, 1903; November, 1910, to November, 1912, April, 1922, to September 30, 1936. Prior to December 6, 1912, station maintained just below mouth of Lost Canon Creek.

Maximum discharge observed during period 1895-1903, 1910-12, 1922-36; 10,000 second-feet, October 5, 1911. Gage height, 10.2 feet, former site and datum.

Maximum Discharge—Year 1935; 3,650 second-feet June 15, 1935. Gage height, 6.15 feet.

Maximum Discharge—Year 1936; 2,880 second-feet May 6, 1936. Gage height, 6.05 feet.

Accuracy—Records considered excellent except those estimated for November 24, 1934, to March 21, 1935, which are fair and were computed on basis of one discharge measurement and weather records, and those for November 21, 1935, to February 2, 1936, computed on basis of two discharge measurements and weather records, and those for March 1-15 and August 16-24, which are fair.

Diversions for irrigation above station.

Discharge of Colorado River Near Grand Lake, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	22	16	16	....	....	12	16	79	258	297	87	32
2....	22	18	15	....	....	14	16	60	222	275	81	29
3....	21	18	14	....	....	14	16	52	193	275	72	28
4....	21	18	14	....	....	12	16	55	198	269	65	26
5....	19	18	15	....	....	10	16	66	230	233	61	27
6....	19	21	15	....	....	9	16	80	289	206	57	26
7....	18	22	16	....	....	8	16	79	348	198	55	36
8....	18	22	16	....	....	9	16	69	396	222	56	48
9....	17	20	16	....	....	9	17	81	444	200	52	40
10....	16	20	16	*14	....	9	18	98	520	195	47	35
11....	16	20	16	....	....	9	20	96	556	272	44	32
12....	16	20	20	....	....	10	22	92	627	230	42	29
13....	16	21	23	....	....	11	22	103	669	185	40	29
14....	12	22	24	....	....	12	24	103	734	167	39	27
15....	12	21	22	....	....	11	29	88	820	148	37	25
16....	13	22	17	....	....	9	40	80	882	134	36	25
17....	15	19	23	....	....	8	38	90	764	134	46	24
18....	16	16	16	....	....	8	39	130	567	164	40	23
19....	17	16	16	....	....	9	50	107	488	156	35	22
20....	18	17	16	....	....	9	54	78	498	159	33	22
21....	18	17	15	....	....	9	69	69	567	177	32	22
22....	16	18	14	....	....	9	72	74	563	169	32	22
23....	16	19	15	....	*10	9	75	99	560	161	33	22
24....	16	19	16	....	....	10	64	134	524	130	33	21
25....	16	18	16	....	....	10	38	169	484	112	37	21
26....	16	16	16	....	....	11	40	208	396	99	34	23
27....	15	14	16	....	....	11	47	244	367	88	32	36
28....	14	16	15	....	....	13	58	236	342	80	29	33
29....	14	14	15	....	....	15	64	224	329	79	29	33
30....	14	16	14	....	....	16	79	219	306	114	29	31
31....	16	....	14	....	....	16	....	258	....	105	29	....
Total	515	554	512	....	....	331	1107	3620	14151	5433	1374	849
Mean	16.6	18.5	16.5	13	12	10.7	36.9	117	472	175	44.3	28.3
Max.	22	22	24	....	....	16	79	258	882	297	87	48
Min.	12	14	14	....	....	8	16	52	193	79	29	21
Acre-ft.	1020	1100	1020	799	666	657	2200	7180	28070	10780	2730	1680

Total run-off for water year 1934-35=57,900 acre-feet.

Discharge of Colorado River Near Grand Lake, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	30	18	13	19	18	15	14	425	626	178	88	42
2....	28	18	12	19	18	15	14	418	519	154	86	35
3....	27	17	12	19	18	16	14	432	439	143	160	36
4....	27	17	11	19	18	16	14	473	411	145	147	47
5....	27	17	10	19	16	15	14	519	394	129	115	39
6....	26	17	10	18	17	15	15	571	332	122	127	35
7....	25	17	11	15	17	15	17	519	316	122	145	31
8....	24	16	12	16	17	15	20	452	381	109	115	28
9....	23	16	12	17	17	15	22	401	449	134	98	26
10....	23	16	13	18	17	15	24	340	432	125	91	25
11....	23	16	13	18	17	15	42	305	432	156	93	44
12....	23	15	13	17	17	15	65	315	411	233	89	43
13....	24	16	14	16	17	17	91	335	494	170	95	39
14....	24	17	13	17	17	17	125	358	483	133	89	37
15....	23	17	12	18	17	16	176	415	483	116	74	31
16....	24	17	11	18	17	15	259	508	537	118	64	30
17....	26	16	11	17	17	15	316	483	498	111	61	29
18....	26	16	12	17	17	16	368	483	449	142	57	29
19....	25	15	13	17	17	16	425	498	442	118	57	27
20....	24	15	14	18	17	15	459	530	411	107	61	26
21....	25	15	14	18	16	15	456	552	374	102	58	26
22....	22	15	15	18	16	16	476	519	374	93	52	26
23....	21	15	15	19	15	16	505	462	339	79	46	25
24....	20	15	16	18	15	15	526	466	280	73	41	24
25....	19	14	17	17	15	16	559	512	301	78	37	24
26....	18	14	17	17	15	16	523	563	401	71	35	24
27....	18	14	17	19	15	16	516	575	313	102	32	25
28....	18	14	17	19	14	16	501	541	283	86	33	28
29....	18	14	18	18	14	17	490	530	265	78	31	30
30....	18	13	18	17	....	16	462	594	215	88	30	30
31....	18	....	19	17	....	15	....	594	....	89	32	....
Total	715	472	425	549	478	483	7508	14688	12084	3704	2339	941
Mean	23.1	15.7	13.7	17.7	16.5	15.6	250	474	403	119	75.5	31.4
Max.	30	18	19	19	18	17	559	594	626	233	160	47
Min.	18	13	10	15	14	15	14	305	215	71	30	24
Acre-ft.	1420	936	843	1090	948	958	14890	29130	23970	7350	4640	1870

Total run-off for water year 1935-36=88,040 acre-feet.

*Discharge measurement.

Discharge of Colorado River Near Granby, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	71	41	.	.	.	.	50	139	1020	1490	363	150
2....	71	47	.	.	.	.	50	118	845	1420	363	146
3....	71	47	.	.	.	.	50	104	697	1390	342	118
4....	71	54	.	.	.	.	50	101	660	1490	318	112
5....	69	49	.	.	.	.	50	110	697	1350	308	101
6....	67	50	.	.	.	.	50	132	868	1210	284	98
7....	62	52	.	.	.	.	50	136	1100	1130	266	110
8....	58	52	.	.	.	.	50	128	1380	1130	266	150
9....	56	52	.	.	.	.	55	139	1610	1070	256	150
10....	54	52	.	*	33	.	60	165	1920	1010	238	142
11....	52	52	.	.	.	.	65	174	2160	1180	220	128
12....	52	50	.	.	.	.	75	178	2490	1100	203	122
13....	50	50	.	.	.	.	75	203	2580	918	190	112
14....	49	49	.	.	.	.	85	238	2760	852	182	104
15....	47	49	.	.	.	.	107	225	3120	838	169	98
16....	43	49	.	.	.	.	81	212	3230	741	161	90
17....	45	56	.	.	.	.	72	238	2530	709	186	83
18....	47	52	.	.	.	.	66	368	1830	734	198	81
19....	47	45	.	.	.	.	77	358	1670	703	186	77
20....	49	43	.	.	.	.	79	294	1870	697	169	75
21....	47	56	.	.	.	.	93	252	2300	691	153	72
22....	47	43	.	.	.	.	104	252	2240	672	146	72
23....	43	47	.	*	36	.	112	308	2300	666	150	68
24....	43	45	.	.	.	.	110	395	2130	606	153	68
25....	43	39	.	.	.	.	88	506	1940	546	165	68
26....	43	36	.	.	.	.	90	630	1580	494	165	70
27....	43	38	.	.	.	.	104	787	1590	460	161	110
28....	41	37	.	.	.	.	118	860	1540	427	150	104
29....	41	36	.	.	.	.	118	830	1430	416	142	98
30....	39	36	.	.	.	.	136	808	1430	472	132	96
31....	38	.	.	.	.	.	1010	.	472	128	.	.
Total	1599	1404	.	.	.	.	2370	10398	53517	27084	6513	3073
Mean.	51.6	46.8	36	34	32	32	79.0	335	1784	874	210	102
Max..	71	56	.	.	.	.	136	1010	3230	1490	363	150
Min..	38	36	.	.	.	.	50	101	660	416	128	68
Acre-ft.	3170	2780	2210	2090	1780	1970	4700	20620	106100	53720	12920	6100

Total run-off for water year 1934-35=218,200 acre-feet.

Discharge of Colorado River Near Granby, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	90	66	42	38	33	35	45	691	2540	798	444	135
2....	86	68	42	38	33	37	42	666	2140	690	416	129
3....	81	68	40	38	32	42	34	715	1680	630	516	129
4....	79	70	40	38	32	40	30	978	1520	576	612	142
5....	79	68	40	38	31	38	27	1300	1520	494	540	132
6....	79	70	42	39	31	38	20	1580	1350	522	516	123
7....	75	68	42	37	30	40	25	1240	1200	516	504	114
8....	72	64	42	33	30	41	40	926	1470	488	433	105
9....	70	66	41	33	30	42	45	747	1900	499	380	95
10....	68	64	41	34	31	42	50	672	1860	552	340	95
11....	68	62	42	34	32	42	55	654	1830	711	330	114
12....	68	60	42	34	32	43	70	774	1760	1260	330	117
13....	68	58	43	35	32	44	100	1020	1960	1010	330	108
14....	66	58	41	35	32	44	130	1250	1980	746	310	102
15....	66	60	40	35	32	44	270	1590	1920	636	281	95
16....	66	56	39	35	32	45	320	1950	1960	576	248	89
17....	66	64	39	34	32	45	400	1890	1880	540	235	84
18....	66	52	40	34	32	45	582	1810	1750	582	227	82
19....	64	54	40	34	32	45	697	1820	1760	540	223	77
20....	66	58	41	32	31	46	754	1900	1620	482	227	75
21....	66	56	41	34	31	46	808	1970	1470	450	223	73
22....	64	54	41	34	31	47	868	1900	1380	416	202	71
23....	58	49	41	35	31	47	909	1730	1320	380	182	71
24....	62	48	41	35	32	47	978	1770	1160	355	163	66
25....	66	50	42	35	33	48	1060	1940	1220	350	149	64
26....	75	52	42	35	33	48	978	2190	1360	335	135	62
27....	72	53	42	35	34	48	969	2290	1190	345	129	60
28....	66	53	41	35	34	49	884	2250	1100	395	129	64
29....	68	50	40	34	35	50	838	2090	1110	460	123	68
30....	72	48	39	34	34	48	780	2290	960	450	117	71
31....	70	38	33	33	46	46	2470	.	444	123	.	.
Total	2182	1767	1267	1087	926	1362	12808	47063	47870	17228	9117	2812
Mean.	70.4	58.9	40.9	35.1	31.9	43.9	427	1518	1596	556	294	93.7
Max..	90	70	43	39	35	50	1060	2470	2540	1260	612	142
Min..	58	48	38	32	30	35	20	654	960	335	117	60
Acre-ft.	4330	3500	2510	2160	1840	2700	25400	93350	94950	34170	18080	5580

Total run-off for water period 1935-36=288,600 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

**Discharge of Colorado River Near Hot Sulphur Springs, Colorado, for
Year Ending Sept. 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	166	94	106	82	88	82	139	364	2160	2270	622	330
2....	166	103	106	82	91	82	139	335	1870	2130	583	302
3....	163	97	106	85	88	82	142	298	1560	2130	546	271
4....	149	106	103	85	88	82	146	266	1540	2140	517	262
5....	135	106	103	88	85	85	149	280	1610	1960	505	280
6....	132	110	97	88	85	88	149	330	1850	1780	471	271
7....	129	126	94	88	85	88	156	359	2160	1680	450	266
8....	122	126	91	88	85	88	166	378	2510	1740	450	302
9....	119	126	88	88	85	88	173	383	2860	1610	428	307
10....	119	126	85	86	85	88	184	403	3310	1550	403	271
11....	113	122	85	85	85	88	202	433	3690	1670	378	236
12....	113	110	82	85	85	91	206	460	4120	1710	364	221
13....	110	110	82	85	82	94	213	511	4350	1390	340	206
14....	110	110	82	85	79	94	298	565	4640	1290	312	198
15....	106	110	84	85	79	91	344	540	5100	1160	307	195
16....	100	113	85	85	82	88	383	505	5370	1120	302	188
17....	100	110	82	82	85	91	312	577	4400	1110	373	180
18....	100	139	82	82	85	91	253	822	3320	1230	354	173
19....	103	129	82	82	85	94	289	830	3010	1120	321	170
20....	103	110	82	79	88	97	316	670	3190	1110	284	163
21....	103	126	82	76	84	100	316	577	3690	1070	275	152
22....	97	116	82	76	85	103	354	590	3600	1050	266	152
23....	94	132	82	82	85	103	349	715	3640	1040	275	152
24....	97	113	82	85	82	106	330	906	3370	896	307	149
25....	106	110	82	85	79	110	262	1100	3140	804	340	149
26....	103	129	82	85	79	113	253	1380	2600	722	330	159
27....	100	119	82	88	79	116	302	1670	2570	663	302	221
28....	94	116	82	88	82	122	354	1830	2500	629	302	225
29....	97	113	82	85	....	125	344	1830	2230	629	293	217
30....	91	110	79	85	....	129	373	1750	2270	745	280	206
31....	88	....	79	85	....	132	....	2090	....	745	284	....
Total	3528	3467	2703	2615	2355	3031	7596	23747	92230	40893	11564	6574
Mean...	114	116	87.2	84.4	84.1	97.8	253	766	3074	1319	373	219
Max...	166	139	106	88	91	132	383	2090	5370	2270	622	330
Min...	88	94	79	76	79	82	139	266	1540	629	266	149
Acre-ft. 7000	6880	5360	5190	4670	6010	15070	47100	182900	81110	22940	13040	....

Total run-off for water year 1934-35 = 397,300 acre-feet.

**Discharge of Colorado River Near Hot Sulphur Springs, Colorado, for
Year Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	191	163	119	103	100	106	122	1660	4180	1250	779	344
2....	180	166	110	100	97	110	122	1600	3680	1080	779	316
3....	166	166	103	103	97	113	126	1780	2930	967	896	312
4....	163	166	100	100	97	110	129	2290	2700	896	1080	316
5....	163	166	100	103	94	106	129	2840	2620	770	925	302
6....	159	173	104	103	97	106	129	3420	2360	796	896	284
7....	152	173	103	100	97	106	129	3000	2180	796	868	266
8....	152	142	106	97	91	106	132	2420	2390	779	754	253
9....	149	149	106	100	91	106	135	1940	2870	745	678	240
10....	142	139	103	104	94	110	142	1780	2920	878	622	236
11....	142	132	103	106	94	110	221	1650	3110	1230	622	258
12....	142	132	103	103	95	116	302	1710	3320	2210	629	258
13....	146	139	110	103	94	118	378	1990	2940	1690	622	244
14....	149	132	106	106	94	122	643	2630	2860	1240	559	236
15....	149	126	103	106	94	122	1120	3170	2960	998	511	221
16....	149	116	97	106	94	119	1310	3770	2960	916	477	217
17....	170	132	97	103	94	122	1540	3760	2870	858	466	206
18....	163	132	97	103	94	122	1710	3640	2660	887	466	195
19....	170	139	100	100	94	122	1880	3620	2540	868	455	191
20....	191	146	103	100	94	119	2010	3720	2340	788	466	191
21....	195	142	103	103	91	122	1840	3830	2140	730	455	188
22....	170	129	103	103	94	126	1950	3700	2040	678	418	188
23....	152	129	100	103	97	126	2060	3460	1990	609	378	184
24....	149	129	103	103	100	122	2130	3460	1740	559	344	180
25....	173	129	103	103	103	126	2340	3580	1790	552	321	180
26....	177	135	106	103	103	129	2110	3830	1970	583	298	206
27....	184	132	103	106	103	129	2210	3970	1740	590	289	213
28....	166	132	106	106	103	129	2110	4050	1650	656	293	221
29....	170	132	103	100	103	132	2100	3700	1730	715	284	225
30....	202	120	100	100	....	129	1870	3880	1550	715	271	232
31....	195	....	103	97	....	126	....	4100	....	715	298	....
Total	5121	4238	3206	3176	2793	3667	33129	93950	75730	27744	17199	7103
Mean...	165	141	103	102	96.3	118	1104	3031	2524	895	555	237
Max...	202	173	119	106	103	132	2340	4100	4180	2210	1080	344
Min...	142	116	97	97	91	106	122	1600	1550	552	271	180
Acre-ft. 10160	8410	6360	6300	5540	7270	65710	186300	150200	55030	34110	14090	....

Total run-off for water year 1935-36 = 549,500 acre-feet.

**Discharge of Colorado River at Glenwood Springs, Colorado, for
Year Ending Sept. 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	863	450	510	557	485	557	1090	1770	7310	7060	3100	1240
2	821	516	521	475	579	612	984	1820	6900	6780	2700	1340
3	710	574	547	400	526	601	717	1700	6150	6330	2460	1440
4	730	432	531	450	516	584	995	1700	5810	6510	2280	1310
5	717	590	450	455	500	618	1310	1600	6330	6240	2180	1250
6	737	552	332	500	547	495	995	1560	7340	5650	2090	1200
7	542	752	335	677	568	536	946	1710	8840	5270	1920	1160
8	635	595	352	652	450	590	767	1880	10100	5040	1920	1160
9	829	563	386	516	530	557	965	1900	11100	5100	2000	1310
10	664	574	455	595	579	557	1060	2030	12400	5170	1940	1580
11	612	563	432	752	547	536	760	2210	14300	5170	1840	1490
12	531	590	382	373	563	536	760	2630	15600	5250	1750	1330
13	521	677	418	717	563	652	760	2840	17400	5170	1610	1380
14	584	557	505	500	552	704	917	3000	18600	4500	1580	1140
15	606	606	704	612	516	704	1110	3100	19900	4170	1430	1090
16	521	568	579	717	510	717	1310	2980	20500	4010	1360	1060
17	521	677	595	495	516	717	1480	3020	18300	3650	1330	1040
18	521	510	652	427	516	717	1790	3260	15000	3460	1480	821
19	542	690	601	441	542	846	1380	3490	12300	3560	1540	863
20	521	697	557	450	516	717	1370	3410	11700	3410	1430	846
21	510	697	552	310	623	704	1440	3110	12500	3320	1330	804
22	521	697	601	286	574	697	1880	2940	12800	3380	1250	1070
23	470	584	647	490	584	697	2030	3050	12400	3480	1220	936
24	445	635	612	445	568	697	2020	3600	11900	3480	1190	697
25	505	658	677	704	505	745	1850	4360	10900	3220	1210	797
26	485	647	606	684	485	760	1580	5220	9580	2940	1330	846
27	495	641	612	552	445	730	1450	6180	8680	2700	1490	1180
28	465	500	563	563	568	789	1440	7150	8270	2560	1450	1430
29	521	500	612	568	....	863	1610	7210	7880	2390	1370	1240
30	455	521	641	584	....	723	1710	6990	7440	2500	1270	1270
31	418	....	490	629	....	871	....	7120	....	2990	1250	....
Total	18018	17813	16477	16576	15033	20829	38476	104540	348230	134460	52300	34320
Mean.	581	594	532	535	537	672	1283	3372	11610	4338	1687	1144
Max..	863	752	704	752	623	871	2030	7210	20500	7060	3100	1580
Min..	418	432	335	286	445	495	717	1560	5810	2390	1190	697
Ac.-ft.	35740	35330	32680	32880	29820	41310	76320	207400	690700	266700	103700	68070

Total run-off for water year 1934-35=1,621,000 acre-feet.

**Discharge of Colorado River at Glenwood Springs, Colorado, for
Year Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1240	1060	568	557	629	618	671	6720	16600	6210	3300	2060
2	1200	1110	552	579	737	635	664	6100	15400	5200	3750	1970
3	1140	946	574	542	690	658	6360	13300	4500	3790	1820	....
4	1020	1050	596	542	500	671	612	7850	11100	4250	3700	1700
5	946	1100	500	547	568	737	618	10000	10100	4050	3730	1680
6	907	965	601	574	547	863	629	12200	9390	3840	3480	1630
7	917	984	671	531	547	752	629	12400	8360	3730	3600	1540
8	907	995	723	542	505	760	552	11200	8750	3610	3430	1470
9	888	1000	684	536	465	760	595	9390	9980	3560	3170	1380
10	846	965	658	536	658	898	710	7090	10800	3490	3080	1380
11	846	907	635	542	552	782	880	6480	11000	3920	2900	1370
12	846	974	664	690	547	782	946	6780	10900	5000	2900	1370
13	812	838	671	629	618	767	1270	8080	10900	6510	3050	1490
14	812	767	690	568	658	782	2040	9650	11100	5330	3140	1450
15	697	880	606	635	767	730	2630	11600	10800	4310	2840	1390
16	926	926	526	690	531	641	3370	14000	10600	3920	2600	1370
17	846	880	432	557	460	821	4010	15400	10500	3680	2510	1140
18	854	829	386	584	568	697	4700	15700	9850	3650	2520	1180
19	797	774	369	422	568	629	5100	15300	9450	3750	2450	1300
20	797	965	455	505	568	697	5510	15700	8910	3790	2440	1210
21	789	846	395	629	568	745	6070	16100	8300	3480	2620	1050
22	854	697	445	618	568	723	5980	15800	7850	3280	2630	1050
23	946	737	460	629	737	717	6780	15100	7850	2990	2440	1050
24	821	782	485	641	697	704	6990	14600	7530	2820	2180	974
25	871	717	495	658	658	658	7280	14600	6990	2720	2020	871
26	880	804	658	629	595	690	7880	15300	7060	2870	1880	838
27	917	767	516	652	584	595	7850	15900	7280	2700	1710	1130
28	1120	812	536	612	623	595	7720	15800	6750	2780	1570	854
29	946	804	526	629	612	629	7520	15700	6510	3100	1640	898
30	1020	730	563	505	....	737	7400	15800	6780	3050	1600	1120
31	926	....	568	460	....	774	....	16400	....	3120	1610	....
Total	28334	26611	17208	17970	17325	22247	108274	379100	290690	119210	84310	39735
Mean.	914	887	555	580	597	718	3609	12230	9690	3845	2720	1324
Max..	1240	1110	723	690	767	898	7880	16400	16600	6210	3790	2060
Min..	697	697	369	422	460	595	552	6100	6510	2700	1570	838
Ac.-ft.	56200	52780	34130	35640	34360	44130	214800	751900	576600	236400	167200	78810

Total run-off for water year 1935-36=2,283,000 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Colorado River Near Cameo, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	1420	864	990	954	1030	936	1240	2830	13400	13900	4470	2110
2....	1400	936	963	970	882	909	1290	2900	12600	13200	4100	2150
3....	1300	972	1040	880	963	1040	1290	2810	11600	12600	3620	2190
4....	1250	1010	1080	780	918	1060	1160	2670	11300	12400	3320	2140
5....	1240	900	1090	770	900	1060	1540	2480	12400	12100	3160	2000
6....	1230	1080	1020	810	882	1050	1600	2410	14300	11000	3020	1900
7....	1200	1080	980	850	963	846	1370	2530	16900	10100	2880	1890
8....	1180	1130	900	930	1020	891	1330	2710	19300	9770	2810	2080
9....	1330	1110	930	1000	1020	918	2030	2900	21400	9440	2880	2350
10....	1150	1070	960	920	1040	891	2100	3120	24300	9540	2850	2420
11....	1100	1040	1020	940	972	891	1700	3390	26600	9770	2680	2490
12....	1070	1040	1000	980	954	891	1200	3350	28500	9280	2570	2360
13....	1040	1080	920	900	945	882	1220	4520	30800	9340	2460	2180
14....	1020	1170	920	1070	954	882	1260	5110	32100	8480	2320	2150
15....	999	1030	930	972	963	927	1260	5160	34300	7680	2180	1910
16....	1050	1060	1000	1270	837	1020	1310	4940	34900	7190	2100	1860
17....	1030	1040	1110	1150	882	1070	2080	4850	30700	6450	2040	1770
18....	1010	1040	1220	900	927	1080	2350	5250	26200	5940	2100	1680
19....	999	963	1160	936	945	1130	2350	6000	22900	5900	2210	1550
20....	1050	1140	1110	954	972	1220	2060	5980	21600	5820	2170	1510
21....	1080	1110	1030	1120	972	1070	2200	5410	23000	5530	2010	1420
22....	972	1080	1010	900	1060	1060	2500	5000	23600	5300	1910	1390
23....	1010	1080	1030	890	972	1100	3020	5130	23100	5360	1870	1380
24....	954	972	1030	820	999	1050	3080	5950	22600	5250	1940	1340
25....	909	1050	990	920	945	1050	2960	7660	21100	4990	1910	1320
26....	936	1060	1010	1110	873	1070	2710	9280	18700	4520	2280	1620
27....	927	1060	855	1270	819	1120	2620	11100	17300	4130	2390	2430
28....	945	1050	945	1360	730	1080	2350	13200	16400	3370	2390	2490
29....	927	918	1340	....	1130	2430	14100	15000	3660	2250	2420	....
30....	963	981	999	1270	....	1160	2640	13400	14400	3540	2150	2320
31....	900	954	1130	....	1150	....	13500	....	3820	2070	....	....
Total	33591	31125	31114	31066	26347	31634	58250	180140	641300	239870	79110	58820
Mean.	1084	1038	1004	1002	941	1020	1942	5511	21380	7738	2552	1961
Max..	1420	1170	1220	1360	1060	1220	3080	14100	34900	13900	4470	2490
Min..	900	864	855	770	738	846	1160	2410	11300	3540	1870	1320
Ac.-ft.	66630	61740	61710	61620	52260	62750	115500	357300	1272000	475800	156900	116700

Total run-off for water year 1934-35 = 2,861,000 acre-feet.

Discharge of Colorado River Near Cameo, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	2290	1690	1320	1190	970	1160	1380	10800	26000	9760	4560	2820
2....	2220	1730	1130	1180	1270	1170	1110	9670	24500	8580	5000	2850
3....	2140	1870	1130	1180	1360	1150	1100	9550	21200	7550	5570	2780
4....	2060	1770	1140	1190	1280	1160	1070	11700	17700	6800	5530	2600
5....	1920	1770	1170	1160	1010	1240	1070	15500	15400	6500	5380	2500
6....	1900	1750	1150	1210	1120	1270	936	18600	13900	6220	5250	2410
7....	1860	1680	1360	1220	1130	1440	900	19200	12500	5740	5250	2340
8....	1860	1740	1330	1120	1180	1260	918	16500	13400	5530	5110	2250
9....	1860	1730	1360	1160	1030	1260	847	13200	16200	5340	4690	2140
10....	1830	1730	1320	1150	1010	1300	856	11000	18000	5250	4320	2060
11....	1780	1700	1240	1210	1280	1440	1130	10000	18700	5500	4110	2060
12....	1770	1630	1300	1180	1190	1370	1520	10300	18700	6520	4020	2170
13....	1740	1620	1280	1330	1160	1270	1770	12200	18800	8190	3960	2180
14....	1720	1580	1320	1220	1220	1270	2500	14800	18900	7980	4170	2270
15....	1620	1500	1320	1180	1290	1340	3500	17600	18700	6600	3940	2170
16....	1430	1550	1190	1270	1400	1270	4580	21100	18200	5860	3530	2080
17....	1670	1520	1060	1310	1150	1150	5910	23700	17800	5530	3290	2010
18....	1610	1510	940	1160	1050	1310	7120	24100	16900	5380	3340	1900
19....	1600	1520	910	1130	1180	1310	7930	23800	16200	5260	3210	1910
20....	1560	1440	940	890	1240	1150	8290	24300	15300	5430	3170	1880
21....	1610	1560	1090	1120	1220	1180	9210	24900	14200	5180	3700	1860
22....	1550	1430	1050	1310	1120	1260	9640	25000	13200	4710	3770	1710
23....	1610	1320	1110	1250	1310	1270	10400	24400	12800	4320	3390	1690
24....	1620	1380	1150	1280	1510	1260	11400	23600	12300	3910	3100	1680
25....	1640	1430	1210	1300	1300	1250	11300	23400	11400	3680	2840	1570
26....	1640	1340	1220	1310	1160	1120	11900	24300	11100	3770	2630	1480
27....	1670	1390	1380	1250	1080	1170	12300	25100	11600	3580	2520	1420
28....	1680	1380	1230	1240	1090	1080	12100	25100	10900	3650	2280	1780
29....	1790	1400	1260	1220	1140	1130	11800	24800	10400	3840	2250	1500
30....	1680	1380	1170	1230	....	1090	11600	25000	10300	4360	2250	1550
31....	1740	....	1180	1010	....	1080	....	25500	....	4580	2240	....
Total	54670	47010	36960	37160	34450	38180	166087	588720	475200	175200	118370	61620
Mean.	1764	1568	1192	1199	1188	1232	5536	18990	15840	5652	3818	2054
Max..	2290	1870	1380	1330	1510	1440	12300	25500	20000	9760	5570	2850
Min..	1430	1320	910	890	1010	1080	847	9550	10300	3580	2240	1420
Ac.-ft.	108400	93300	73310	73710	68330	75730	329400	1168000	942500	347500	234800	122200

Total run-off for water year 1935-36 = 3,637,000 acre-feet.

Discharge of Colorado River Near Cisco, Utah, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	1580	1280	2030	2110	2230	1770	2500	6220	23300	18500	4890	3780
2....	1670	1190	1960	1780	2190	1950	2940	6220	21300	17700	5320	3210
3....	1580	1240	1920	1640	2030	2070	3400	5880	19700	16900	5100	3210
4....	1520	1340	1780	1630	2040	2230	3490	5650	19700	16200	4470	3120
5....	1440	1410	1700	1540	1980	2340	3680	5210	20900	15800	4270	2760
6....	1390	1470	1650	1680	1920	2200	3870	5000	23700	14700	3570	2500
7....	1360	1410	1640	2110	2010	2070	3780	4580	27100	13300	3780	2420
8....	1360	1560	1610	2140	2060	1880	3210	5100	30900	12200	3490	3120
9....	1420	1610	1750	2250	2150	1870	3400	5990	33900	11900	3400	3300
10....	1170	1710	1800	2200	2120	1980	4170	7430	37000	11600	3680	3680
11....	1230	1720	1900	2150	2040	1950	3300	8220	41000	11900	3970	3780
12....	1320	1670	1980	2500	1990	1900	2760	9360	44100	11900	3870	3680
13....	1320	1650	2120	2590	1950	1820	2500	10300	46400	11600	3580	3400
14....	1260	1680	2090	2230	1990	1900	2760	11900	47700	11600	3300	3030
15....	1270	1740	2270	2370	1980	2110	3680	12900	50500	10600	2940	2850
16....	1380	1700	2590	2270	1900	2350	4580	12200	53200	9660	3030	2590
17....	1280	1650	2940	2590	1810	2280	5100	11200	53200	8780	2850	2420
18....	1320	1700	2590	2350	1800	2350	5540	10600	44600	8220	2550	2350
19....	1320	1770	2390	1960	1720	2270	5210	11900	36100	8500	2680	2200
20....	1330	2110	2220	1700	1920	2280	5210	13300	33500	9360	2760	1930
21....	1310	1930	2090	1700	2040	2370	5000	13300	33000	8500	2680	1880
22....	1340	2030	2090	1550	2200	2190	5430	11900	35700	8500	2420	1810
23....	1420	2010	2110	1540	2170	2060	6220	11200	34400	8220	2280	1740
24....	1320	2030	2250	1600	2150	2070	6930	12600	32600	7950	2590	1720
25....	1300	1960	2170	1880	2150	2090	6450	15400	31800	7430	2760	1770
26....	1320	1980	2170	2190	2070	2110	6220	18500	28300	6450	2850	2760
27....	1250	2140	2190	2390	1950	2110	5540	21300	24600	5880	3580	3300
28....	1280	2190	1950	2420	1870	2090	5320	23300	22900	5650	4070	4680
29....	1230	2110	2060	2250	...	2110	5650	25400	21300	5210	4070	4680
30....	1310	1920	2120	2280	...	1960	5990	25000	19300	4470	3370	4470
31....	1330	...	2120	2250	...	2230	...	23300	...	4780	3490	...
Total	41930	51910	64250	63840	56430	64960	133830	370360	991700	323960	103760	88140
Mean	1353	1730	2073	2059	2015	2095	4461	11950	33060	10450	3508	2938
Max..	1670	2190	2940	2590	2230	2370	6930	25400	53200	18500	5320	4680
Min..	1170	1190	1610	1540	1720	1770	2500	4580	19300	4470	2280	1720
A.-ft.	83170	103000	127400	126600	111900	128800	265400	734600	1967000	642600	215700	174800

Total run-off for water year 1934-35 = 4,681,000 acre-feet.

Discharge of Colorado River Near Cisco, Utah, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	4470	3120	2760	2420	2800	2350	2590	23700	35200	12200	4780	3870
2....	4270	3210	2590	2400	3050	2340	2760	21300	35700	11600	5320	4580
3....	4070	3120	2400	2300	2800	2400	2590	20100	32200	9660	5760	4680
4....	3870	3300	2280	2300	2600	2420	2400	23700	27100	8500	6100	4170
5....	3680	3300	2370	2300	2650	2500	2250	29200	22500	7690	6220	3870
6....	3490	3210	2500	2300	2700	2500	2250	33900	19700	6930	7430	3580
7....	3300	3210	2590	2300	2600	2590	2350	33200	17700	6450	7950	3400
8....	3120	3210	2850	2100	2500	2590	2220	32600	16600	5990	7950	3300
9....	3030	3300	2760	2200	2400	2390	2090	26200	18900	5650	7180	3030
10....	2940	3300	2760	2300	2350	2390	2140	21700	22500	5880	6690	2760
11....	2850	3300	2680	2350	2600	2760	3400	18500	24600	9070	5990	2940
12....	2760	3300	2500	2500	2680	2940	4580	18100	25400	7430	5650	2940
13....	2680	3210	2500	2300	2760	2850	6450	20500	24600	7950	5210	2850
14....	2680	3120	2680	2400	2940	2760	7950	24600	25000	9360	5100	2850
15....	2590	3120	2590	2550	2940	2850	10270	27500	24600	8500	5430	2850
16....	2590	3030	2500	2400	2940	2940	12200	31300	23700	6930	4890	2680
17....	2590	3120	2060	2300	2940	2940	15100	35700	23300	6450	4270	2590
18....	2590	3030	1900	2100	2680	2760	18100	33800	22500	6340	3870	2500
19....	2590	3030	1900	2000	2420	2850	19700	37900	20900	6100	3870	2250
20....	2760	3030	1820	2350	2420	2850	20100	36600	20100	6220	3780	2500
21....	2760	2940	1820	2350	2420	2760	20900	37000	18500	6100	3870	2590
22....	2760	2940	1770	2000	2590	2760	23300	37900	16900	5650	4890	2270
23....	2760	2760	1960	2000	2760	2940	25000	36100	16200	4890	4780	2040
24....	2850	2760	1990	2100	2940	3210	27500	35200	15800	4070	4270	1960
25....	2850	2760	1980	2200	3030	3120	27100	33500	15100	3780	3680	1870
26....	2940	2760	2010	2300	2760	2940	26200	34400	14000	3780	3210	1810
27....	2940	2850	2280	2400	2500	2760	26700	35200	14000	3780	2680	1700
28....	2940	2850	2230	2400	2390	2760	27100	35700	14000	3580	2500	1840
29....	2940	2850	2420	2400	2350	2500	25400	34800	13300	3680	2350	2170
30....	3120	2760	2250	2600	...	2500	24600	33000	12900	4270	2370	2090
31....	2940	...	2420	2800	...	2400	...	34800	...	4780	2850	...
Total	94720	91800	72120	71720	77510	84020	395290	947300	633500	203260	150890	84530
Mean	3055	3060	2326	2314	2673	2710	13810	30360	21120	6557	4867	2818
Max..	4470	3300	2850	2800	3050	3210	27500	33800	35700	12200	7950	4680
Min..	2590	2760	1770	2000	2350	2340	2090	18100	12900	3580	2350	1700
A.-ft.	187900	182100	143000	142300	153700	166700	784000	1879000	1257000	403200	299300	167700

Total run-off for water year 1935-36 = 5,765,000 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Arapahoe Creek Below Monarch Lake, Colorado, for Year Ending Sept. 30, 1935												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	235	510	48	33
2	210	473	87	32	
3	202	477	87	31	
4	206	510	85	28	
5	223	498	81	27	
6	309	431	75	23	
7	397	410	66	28	
8	494	401	68	33	
9	579	401	79	38	
10	733	376	75	38	
11	927	384	70	35	
12	1040	338	64	32	
13	1050	330	59	29	
14	1110	338	55	28	
15	1230	296	50	26	
16	1120	267	48	26	
17	874	246	60	26	
18	733	254	70	24	
19	764	231	60	24	
20	852	223	57	23	
21	958	216	48	23	
22	949	231	41	21	
23	954	202	38	21	
24	856	186	38	21	
25	826	164	40	21	
26	672	152	48	21	
27	632	144	54	22	
28	540	134	47	21	
29	494	132	42	20	
30	502	144	37	21	
31	105	33	..	..
Total	20671	9204	1810	796	
Mean	689	297	58.4	26.5	
Max.	1230	510	87	38	
Min.	202	105	33	20	
Acre-ft.	41000	18260	3590	1580	

Total run-off for period=64,430 acre-feet.

Discharge of Arapahoe Creek Below Monarch Lake, Colorado, for Year Ending Sept. 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	13	.	.	.	.	7	159	817	258	149	40
2	21	14	.	.	.	.	6	152	724	220	129	38
3	20	14	.	.	.	.	6	177	623	199	142	37
4	20	14	.	.	.	.	5	271	553	117	199	37
5	19	14	*10	.	.	.	5	368	548	101	177	35
6	19	13	.	.	.	.	6	414	536	152	154	33
7	18	13	.	.	.	.	6	300	506	152	136	31
8	18	12	.	.	.	.	7	212	553	142	117	30
9	18	12	.	.	*	8	9	164	672	139	98	29
10	16	13	.	.	.	.	11	142	645	157	90	27
11	16	14	.	.	.	.	21	144	632	242	92	27
12	16	14	.	.	.	.	32	177	667	397	92	26
13	16	13	*	8	.	.	47	254	711	313	92	25
14	15	12	.	.	.	.	55	380	729	284	87	22
15	15	12	.	.	.	.	64	536	685	212	79	21
16	15	12	.	.	.	.	64	584	676	167	75	20
17	14	12	.	.	.	.	85	523	645	162	72	20
18	14	16	.	.	.	.	110	575	575	186	77	19
19	14	18	.	.	.	.	134	566	619	172	77	18
20	14	17	.	.	.	.	170	619	601	152	75	17
21	13	16	.	.	.	.	167	597	562	136	70	15
22	14	16	.	.	.	.	170	540	443	124	66	13
23	14	14	.	.	.	.	193	502	410	112	60	14
24	14	12	.	.	.	.	206	544	389	103	54	13
25	14	12	.	.	.	.	209	614	389	101	52	12
26	14	13	.	.	.	.	199	667	359	96	48	10
27	14	14	.	.	.	.	186	711	317	96	50	12
28	14	16	.	.	.	.	172	724	317	157	47	8.0
29	14	14	.	.	.	.	175	834	326	196	42	9.2
30	14	11	.	.	.	.	172	852	309	172	41	9.6
31	14	.	.	.	.	.	.	746	167	40	..	
Total	492	410	.	.	.	.	2699	14048	16538	5384	2779	667.8
Mean	15.9	13.7	9.5	8.8	8.5	8.0	90.0	453	551	174	89.6	22.3
Max.	21	18	.	.	.	.	209	852	817	397	199	40
Min.	13	11	.	.	.	.	5	142	309	96	40	8.0
Acre-ft.	976	813	584	541	489	492	5350	27860	32800	10680	5510	1320

Total run-off for water year 1935-36=87,420 acre-feet.

*Discharge measurement.

TWENTY-EIGHTH BIENNIAL REPORT

Discharge of Willow Creek Near Granby, Colorado, for Year Ending Sept. 30, 1935												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	46	426	112	28	13
2	15	44	349	106	27	12
3	15	31	329	106	22	12
4	15	35	353	94	20	12
5	15	44	378	79	20	11
6	15	46	426	72	18	11
7	16	47	466	79	18	14
8	16	42	486	78	21	16
9	17	50	494	65	17	15
10	17	89	506	66	16	13
11	18	106	510	78	15	12
12	18	120	535	59	14	11
13	20	149	518	50	13	11
14	24	144	514	52	13	10
15	32	126	518	48	13	10
16	27	132	482	41	14	10
17	24	159	400	42	18	10
18	22	194	319	46	17	10
19	26	178	287	39	15	9.8
20	26	149	268	38	14	9.8
21	31	152	252	59	14	9.8
22	34	166	233	56	14	10
23	36	212	220	48	14	9.8
24	34	268	199	38	15	9.8
25	28	325	176	34	14	9.8
26	27	438	152	29	13	12
27	32	490	135	27	12	16
28	35	470	132	26	12	15
29	38	422	122	27	12	13
30	56	400	122	34	12	13
31	454	...	30	12	...
Total	744	5728	10307	1758	497	350.8
Mean.	24.8	185	344	56.7	16.0	11.7
Max.	56	490	535	112	28	16
Min.	15	31	122	26	12	9.8
Acre-ft.	1480	11360	20440	3490	986	696

Total run-off for period=38,450 acre-feet.

Discharge of Willow Creek Near Granby, Colorado, for Year Ending Sept. 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	...	...	...	...	...	22	254	434	92	72	35
2	12	...	...	...	...	...	20	263	392	85	69	30
3	12	...	...	...	...	...	18	325	355	77	131	30
4	12	...	...	...	...	...	16	436	323	71	123	30
5	12	...	*7.4	...	...	...	11	518	300	65	111	30
6	12	...	...	...	...	...	10	605	272	63	112	29
7	12	...	...	...	...	...	12	568	251	61	113	29
8	12	...	...	...	...	...	18	439	258	57	96	27
9	12	...	...	...	...	...	20	327	270	58	87	27
10	12	...	...	...	...	...	*11	28	300	263	59	80
11	12	...	...	...	...	...	37	316	251	98	78	34
12	12	...	...	...	...	...	41	385	240	112	89	29
13	12	...	...	...	...	...	50	458	242	94	78	28
14	12	...	...	...	...	...	70	525	240	77	71	26
15	12	...	...	...	...	...	95	568	236	70	65	25
16	12	...	...	...	...	...	135	655	229	73	59	24
17	12	...	...	...	...	...	150	645	203	68	56	23
18	12	...	...	...	...	...	190	628	186	84	53	23
19	12	...	...	...	...	...	207	610	171	73	51	22
20	13	...	...	...	...	...	209	608	155	69	54	22
21	13	...	...	...	...	...	197	608	143	63	49	21
22	12	...	...	...	...	...	216	572	145	60	47	21
23	12	...	...	...	...	...	229	540	134	53	41	21
24	12	...	...	...	...	...	209	504	119	47	38	21
25	13	...	...	...	...	...	272	492	126	46	36	21
26	14	...	...	...	...	...	316	499	182	52	33	21
27	13	...	...	...	...	...	327	499	122	66	32	21
28	12	...	...	...	...	...	290	489	118	63	32	21
29	12	...	...	...	...	...	293	458	118	53	31	21
30	12	...	...	...	...	...	279	446	101	56	30	21
31	12	...	...	...	...	...	...	434	...	70	31	...
Total	378	300	232.5	204.5	203	403	3987	14974	6579	2140	2048	761
Mean.	12.7	10	7.5	6.5	7.0	13	133	483	219	69.0	66.1	25.4
Max.	14	...	...	...	...	...	327	655	434	112	131	35
Min.	12	...	...	...	...	...	10	254	101	46	30	21
Acre-ft.	750	595	461	400	403	799	7910	29700	13050	4240	4060	1510

Total run-off for water year 1935-36=63,880 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Fraser River Above West Portal, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	12	7.9	6.5	5	3.5	4	3.4	8.3	70	140	53	33
2....	12	8.3	6	4.5	3.5	4	3.4	7.4	63	130	48	26
3....	11	11	7.5	4.5	3.5	4	3.8	6.6	67	148	45	25
4....	10	14	9	4	3	4	3.4	7.4	85	140	42	24
5....	10	14	8	4	3	4	3.2	7.4	103	127	37	20
6....	10	11	8	4	3	4	3.2	7.4	112	135	35	23
7....	10	10	7.5	4.5	3	4	3.2	7.4	125	125	34	24
8....	9.5	9.1	7.5	4.5	4	4	3.4	7.4	125	117	35	22
9....	9.1	9.1	7	4.5	5	4	4.2	9.1	151	117	30	20
10....	9.5	8.3	7	4.5	5	4	6.2	11	170	110	30	19
11....	9.5	8.3	7	4.5	5	4	3.4	13	209	108	28	19
12....	10	8.7	7	4.5	5	4	6.2	16	227	103	27	18
13....	10	9.1	7	4.5	5	4.5	4.8	16	239	93	27	18
14....	10	10	7	4.5	5	5.5	6.2	15	262	93	25	17
15....	10	10	7	5	5.5	6	8.7	15	281	85	24	17
16....	10	9.5	6.5	5	5	6.5	9.1	18	278	78	27	17
17....	11	8.3	6.5	5	4.5	6.5	7.0	20	218	78	29	16
18....	11	6.6	6.5	4.5	4	4	7.4	20	194	75	27	15
19....	11	8.3	6.5	4.5	4.5	4	8.7	18	194	72	22	15
20....	11	13	6.5	4.5	4.5	3.5	11	16	206	70	24	15
21....	10	14	6.5	4.5	4.5	3.4	11	17	221	72	24	15
22....	10	12	6	4.5	4	2.8	10	18	224	77	24	15
23....	9.1	8.7	6	4.5	3.5	3.8	9.5	21	215	74	24	15
24....	8.7	8.3	6	4.5	3.5	2.7	12	24	200	66	27	15
25....	9.1	8.7	5.5	4.5	3.5	2.7	21	32	188	60	35	15
26....	9.1	8.7	5.5	5	4	3.8	22	38	182	56	31	16
27....	8.3	8.3	5.5	4.5	4	3.4	11	50	179	51	29	16
28....	8.3	10	5.5	4	4	5.9	8.7	60	168	50	29	15
29....	8.3	9.5	5.5	3.5	...	3.8	9.1	58	156	53	28	15
30....	8.3	7	5.5	4.5	...	3.8	10	74	148	66	27	14
31....	7.9	...	5	4	4.8	...	77	...	58	29	...	557
Total	303.7	289.7	204.0	138.5	115.5	129.4	234.4	715.0	5212	2850	966	18.6
Mean.	9.80	9.66	6.58	4.47	4.12	4.17	7.81	23.1	1.74	91.9	31.2	33
Max..	12	14	9	5	5	6.5	22	77	281	148	53	22
Min..	7.9	7	5	3.5	3	2.7	3.2	6.6	63	50	22	14
Acre-ft.	602	575	405	275	229	257	465	1420	10340	5650	1920	1100

Total run-off for water year 1934-35=23,240 acre-feet.

Discharge of Fraser River Above West Portal, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	13	13	6.6	6.0	5.2	4.0	5.7	30	201	4.3	3.3	2.1
2....	13	12	6.5	6.0	5.4	4.0	5.2	33	170	4.3	3.1	2.1
3....	13	9.3	6.3	6.5	5.6	4.0	5.2	43	156	3.9	3.1	2.3
4....	13	12	7.0	6.5	5.8	4.0	8	53	154	3.9	3.1	2.0
5....	13	13	7.0	6.5	6.0	3.7	7	66	138	3.7	3.1	1.9
6....	13	9.3	7.0	6.0	6.2	3.6	7	63	128	3.7	3.1	1.9
7....	13	6.9	7.0	6.0	6.6	3.4	7	54	135	3.7	2.9	1.8
8....	13	10	6.5	6.0	6.6	4.2	6	47	160	3.7	2.9	1.5
9....	13	12	7.0	6.5	6.6	4.5	6	41	153	3.9	2.7	1.5
10....	13	7.4	6.5	7.0	6.6	4.3	6	40	133	3.9	2.5	1.5
11....	12	5.9	6.5	7.5	6.7	3.9	7	37	107	5.9	2.7	1.5
12....	12	5.5	6.0	6.5	6.7	3.9	8	49	81	7.4	3.3	1.5
13....	12	5.5	5.5	6.5	6.8	3.9	10	53	28	4.1	2.7	1.5
14....	12	5.5	5.3	6.5	6.6	3.9	12	62	59	3.7	2.5	1.5
15....	12	6.0	5.3	6.0	6.4	3.9	15	82	165	3.7	2.5	1.5
16....	12	5.0	5.0	6.0	6.2	4.0	16	94	173	3.9	2.4	1.5
17....	13	6.0	4.8	6.5	5.8	3.5	19	100	168	3.7	2.5	1.4
18....	14	6.4	4.8	6.5	5.5	4.0	21	106	130	3.5	2.5	1.4
19....	13	6.9	4.8	6.0	5.2	4.5	25	111	66	3.3	2.5	1.4
20....	12	6.9	5.0	5.8	4.7	5.0	27	119	11	3.1	2.7	1.4
21....	11	7.4	5.0	6.0	4.8	5.5	23	125	9.9	3.1	2.5	1.4
22....	12	7.4	5.0	6.2	5.0	6.0	26	125	9.3	3.1	2.4	1.4
23....	11	8.8	5.0	6.2	4.8	6.0	27	127	9.3	2.7	2.3	1.4
24....	11	7.9	5.0	6.2	4.6	6.0	33	133	8.8	2.7	2.3	2.1
25....	11	8.3	5.5	6.2	4.4	7.0	33	141	8.3	3.3	2.1	2.1
26....	12	7.9	5.5	5.7	4.3	7.0	33	154	7.9	3.7	2.1	2.1
27....	8.8	7.4	6.0	5.7	4.4	7.0	32	165	7.4	3.7	2.1	2.2
28....	9.3	7.9	6.0	5.7	4.2	6.0	33	165	5.5	5.0	2.1	2.3
29....	10	7.9	5.5	6.0	4.0	6.0	33	173	5.9	3.9	2.0	2.4
30....	9.9	6.7	5.5	5.6	...	6.0	31	188	4.5	3.7	2.1	2.5
31....	11	...	5.5	5.0	...	6.0	...	207	...	3.7	2.4	...
Total	371.0	242.1	179.9	191.3	161.7	148.7	527.1	2986	2592.8	119.9	80.5	175.5
Mean.	12.0	8.07	5.80	6.17	5.58	4.80	17.6	96.3	86.4	3.87	2.60	5.85
Max..	14	13	7.0	7.5	6.8	7.0	33	207	201	7.4	3.3	2.5
Min..	8.8	5.0	4.8	5.0	4.0	3.4	5.2	30	4.5	2.7	2.0	1.4
Acre-ft.	736	480	357	379	321	295	1050	5920	5140	238	160	348

Total run-off for water year 1935-36=15,420 acre-feet.

**Table to Correct Fraser River Above West Portal, Colorado, for Diversions by Moffat Tunnel
For Water Year October 1, 1935 to September 30, 1936**

Month	Runoff in Acre-feet	Diversion by Moffat Tunnel Acre-feet	Corrected for Diversion Runoff in Ac.-ft.
October	736	0	736
November	480	0	480
December	357	0	357
January	379	0	379
February	321	0	321
March	295	0	295
April	1050	0	1050
May	5920	0	5920
June	5140	4150	9290
July	238	3720	3960
August	160	3110	3270
September	348	1170	1520
Total runoff for water year 1935-36	15420	12150	27580

Discharge of Fraser River Near West Portal, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	9.2	7.5	7.9	6.9	5.7	8.0	15	91	149	61	34
2	12	9.6	8.0	7.7	6.4	5.7	8.0	14	86	143	56	25
3	12	12	8.8	7.5	6.4	5.5	8.0	12	91	161	52	24
4	12	12	11	7.2	5.9	5.5	8.0	13	100	145	50	23
5	11	11	9.3	7.8	5.9	5.3	7.7	14	109	138	48	22
6	11	12	8.4	8.6	5.7	5.7	7.4	14	120	132	44	22
7	11	11	8.8	8.7	5.5	5.7	7.0	14	130	130	42	25
8	11	10	8.8	8.8	6.4	5.7	7.7	14	136	126	41	26
9	11	9.6	8.6	8.9	7.3	5.7	7.7	16	163	118	41	25
10	11	9.6	8.4	9.0	6.9	5.7	8.8	19	195	114	36	22
11	11	9.6	8.4	9.1	6.9	5.9	9.2	21	221	114	35	21
12	11	10	7.5	9.1	6.9	5.9	11	25	238	109	34	20
13	11	11	7.9	9.0	7.3	6.4	12	25	250	103	32	20
14	11	12	8.4	9.0	7.3	6.9	12	22	274	101	30	19
15	11	12	8.4	9.0	6.9	7.8	16	22	291	94	29	18
16	11	10	8.6	8.9	6.4	8.3	16	25	288	88	32	18
17	11	9.6	8.8	8.8	5.9	8.8	12	30	233	88	33	18
18	10	9.6	8.4	8.3	5.9	6.9	12	28	200	86	29	18
19	10	9.6	8.3	8.3	6.4	6.9	15	23	200	85	26	17
20	10	12	8.2	8.8	6.4	6.9	17	22	226	82	25	16
21	9.6	9.6	8.2	8.3	5.7	6.9	18	25	231	82	25	17
22	9.6	10	8.4	8.8	5.9	7.8	16	27	236	85	25	16
23	9.2	9.2	7.9	8.8	5.9	8.3	16	32	224	83	25	16
24	8.8	8.8	7.5	8.8	5.9	7.8	15	38	212	77	30	16
25	9.6	10	7.7	8.8	5.9	8.3	14	48	195	70	35	16
26	9.2	10	7.9	8.8	5.9	10	14	58	186	66	31	18
27	9.2	10	7.9	8.8	5.7	9.7	16	64	186	61	29	18
28	9.2	11	7.9	8.3	5.5	9.7	16	75	177	58	29	18
29	9.2	12	7.9	7.8	....	9.7	16	78	158	61	27	17
30	8.8	8.5	7.9	8.8	....	8.3	16	98	154	75	25	16
31	8.8	....	7.9	7.8	....	8.3	....	98	....	66	28	...
Total	322.2	310.5	257.6	264.2	176.0	221.7	367.5	1029	5601	3090	1085	601
Mean.	10.4	10.4	8.31	8.52	6.29	7.15	12.2	33.2	187	99.7	35.0	20.0
Max.	12	12	11	9.1	7.3	10	18	98	291	161	61	34
Min.	8.8	8.5	7.5	7.2	5.5	5.3	7.0	12	86	58	25	16
Acre-ft.	639	616	511	524	349	440	729	2040	11110	6130	2150	1190

Total run-off for water year 1934-35 = 26,430 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Fraser River Near West Portal, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	16	15	10	8.5	8.2	8.0	9.5	54	242	13	7.6	5.9
2....	15	13	10	8.0	8.4	8.1	8.9	48	215	12	6.6	6.2
3....	15	13	10	8.5	8.6	8.2	9.0	64	196	11	7.3	6.6
4....	16	13	11	8.0	8.8	8.3	12	83	178	11	6.6	5.9
5....	16	13	11	8.0	9.0	8.0	11	107	169	11	6.6	5.3
6....	15	13	11	7.5	9.2	7.8	11	93	156	9.8	6.6	5.0
7....	15	13	11	7.5	9.4	7.6	11	80	165	10	5.9	4.7
8....	15	11	10	8.0	9.4	8.4	9.8	67	187	11	5.6	4.7
9....	15	12	11	8.5	9.4	8.7	9.8	57	185	11	5.3	4.7
10....	15	13	10	9.0	9.4	8.5	9.8	61	152	11	5.0	4.7
11....	14	13	9.4	9.4	9.6	8.0	11	51	122	15	5.9	5.0
12....	14	12	9.0	8.4	9.6	8.0	12	73	98	17	7.6	4.7
13....	14	12	8.4	8.4	9.8	8.0	14	73	46	11	6.6	4.7
14....	14	12	8.0	8.4	9.6	8.0	16	83	81	9.4	5.9	4.7
15....	14	13	8.0	8.0	9.4	8.0	18	107	192	8.7	5.3	4.4
16....	14	11	7.5	8.0	9.2	8.0	20	122	190	8.0	5.3	4.4
17....	15	12	7.0	8.4	9.0	7.5	22	129	185	8.4	5.3	4.4
18....	17	12	7.0	8.4	8.7	8.0	26	129	134	8.0	6.2	4.4
19....	16	12	7.0	8.0	8.4	8.5	27	140	80	7.6	6.2	4.1
20....	16	12	7.5	7.5	8.1	9.0	31	148	21	7.6	6.2	4.1
21....	14	12	7.5	8.0	8.1	9.5	28	152	20	7.6	6.6	4.1
22....	14	11	7.5	8.4	8.1	10	29	156	20	6.9	5.9	3.8
23....	14	11	7.5	8.4	8.7	10	32	165	19	6.6	5.6	3.8
24....	15	12	7.5	8.4	9.1	10	39	169	18	6.2	5.3	3.8
25....	15	12	8.0	8.4	8.1	11	40	183	17	8.4	5.3	18
26....	15	11	8.0	8.0	8.1	11	42	196	17	9.4	5.0	21
27....	15	11	8.5	8.0	7.9	11	42	210	15	9.4	5.0	22
28....	16	11	8.5	8.0	7.9	10	46	219	17	12	5.3	25
29....	13	11	8.0	8.4	7.9	10	46	224	17	9.1	5.0	27
30....	13	10	8.0	8.0	8.0	10	43	247	15	8.0	5.3	28
31....	15	...	8.0	7.5	...	10	...	256	...	7.6	6.6	...
Total	460	362	270.8	253.9	255.1	275.1	685.8	3946	3169	302.7	184.5	255.1
Mean...	14.8	12.1	8.74	8.19	8.80	8.87	22.9	127	106	9.76	5.95	8.50
Max...	17	15	11	9.4	9.8	11	46	256	242	17	7.6	28
Min...	13	10	7.0	7.5	7.9	7.5	8.9	48	15	6.2	5.0	3.8
Acre-ft.	912	718	537	504	506	546	1360	7830	6290	600	366	506

Total run-off for water year 1935-36=20,680 acre-feet.

Table to Correct Fraser River Near West Portal, Colorado, For Diversions by Moffat Tunnel
For Water Year October 1, 1935 to September 30, 1936

Month	Runoff in Acre-feet	Diversions by Moffat Tunnel Acre-feet	Corrected for Diversion Acre-feet
October	912	0	912
November	718	0	718
December	537	0	537
January	504	0	504
February	506	0	506
March	546	0	546
April	1360	0	1360
May	7830	0	7830
June	6290	4150	10440
July	600	3720	4320
August	366	3111	3480
September	506	1170	1680
Total run-off for water year 1935-36.....	20680	12150	32830

Discharge of Vasquez Creek Near West Portal, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	8.3	7.0	5.0	6.0	6.5	6.6	7.5	49	88	53	32
2	11	7.8	6.5	4.5	5.5	7.0	5.9	6.9	45	88	49	23
3	10	13	7.0	4.5	5.5	7.5	5.8	6.3	48	115	46	22
4	9.6	14	9.0	5.5	5.5	7.5	5.6	6.3	54	88	45	21
5	9.2	13	8.0	5.5	6.0	6.5	6.1	7.2	61	86	44	21
6	9.2	13	7.0	6.0	6.0	6.0	5.6	7.8	71	86	42	20
7	9.2	13	7.0	6.0	6.5	5.5	4.0	7.8	83	95	40	24
8	8.9	12	7.0	6.5	6.5	5.5	5.6	7.8	105	88	39	26
9	8.9	12	7.0	6.5	6.0	5.5	5.8	8.3	117	85	37	26
10	8.9	11	7.0	6.0	6.0	6.0	16	10	147	81	35	23
11	8.9	12	6.0	5.0	6.0	6.5	5.4	11	190	81	34	21
12	8.6	12	6.0	5.0	5.5	7.5	7.5	12	238	78	33	19
13	8.9	12	6.5	5.0	5.5	7.5	9.2	14	252	71	31	19
14	8.9	13	7.0	5.0	5.5	6.5	7.5	12	266	70	30	19
15	8.9	12	6.5	5.0	5.5	6.0	8.6	12	295	65	29	19
16	8.9	13	6.5	5.0	5.5	6.0	10	14	234	61	31	17
17	9.6	13	6.0	5.0	6.0	6.5	7.8	18	174	61	32	17
18	9.2	8.9	6.0	5.0	6.0	6.5	7.8	19	159	63	28	17
19	8.9	10	6.0	4.5	6.5	7.0	8.6	15	168	64	26	16
20	8.6	13	6.5	4.5	6.5	7.0	8.6	13	190	60	25	16
21	8.0	13	6.5	4.5	7.0	7.5	8.6	13	200	61	24	16
22	8.0	13	6.5	5.0	7.0	7.5	8.6	17	197	61	24	15
23	8.0	10	6.0	5.5	7.0	7.0	8.0	21	184	57	24	15
24	8.0	11	5.5	6.0	6.5	6.1	8.3	25	178	54	28	15
25	8.3	10	5.5	6.0	6.0	5.9	13	30	153	50	30	15
26	7.5	9.5	5.5	6.0	5.5	6.1	12	36	130	48	27	16
27	8.0	9.0	5.5	6.5	5.5	5.9	10	40	138	48	26	18
28	8.3	9.5	5.5	6.5	5.5	6.3	8.0	45	117	48	24	18
29	8.3	8.5	5.5	6.5	5.5	6.6	8.3	48	102	56	23	18
30	9.2	8.0	5.5	6.5	5.5	6.3	7.8	54	100	67	22	16
31	10	5.5	6.0	5.5	6.0	7.8	57	60	24	..	..	..
Total	276.9	337.5	198.5	170	168	203.5	240.6	601.9	4445	2184	1005	580
Mean.	8.93	11.2	6.40	5.48	6.00	6.56	8.02	19.4	148	70.5	32.4	19.3
Max.	11	14	9.0	6.5	7.0	7.8	16	57	295	115	53	32
Min..	7.5	7.8	5.5	4.5	5.5	5.5	4.0	6.3	45	48	22	15
Acre-ft.	549	669	394	337	333	404	477	1190	8820	4330	1990	1150

Total run-off for water year 1934-35=20,640 acre-feet.

Discharge of Vasquez Creek Near West Portal, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	13	9.6	7.6	7.0	4.3	7.9	31	231	101	68	34
2	13	11	9.3	7.6	7.3	4.5	7.8	33	201	89	60	30
3	13	13	9.2	7.5	7.3	4.5	8.4	44	179	84	56	32
4	13	12	9.5	7.5	7.2	5.0	8.8	58	167	80	51	28
5	13	12	9.6	7.5	7.0	4.6	9.3	86	146	72	53	26
6	13	11	9.4	7.3	6.9	4.4	9.6	65	141	68	52	26
7	13	12	9.7	7.2	6.8	4.5	10	51	158	68	48	25
8	13	10	10	6.8	6.6	4.5	10	45	188	65	45	24
9	13	11	9.5	7.2	6.1	4.5	11	39	188	68	44	24
10	12	10	8.9	7.4	6.2	4.5	11	39	192	70	44	25
11	12	10	9.2	7.4	6.3	4.5	11	41	192	103	44	26
12	12	9.6	9.0	7.3	6.4	4.8	12	50	198	108	52	25
13	12	9.7	9.5	7.4	6.5	5.0	12	53	201	75	46	25
14	12	10	9.0	7.6	6.5	5.0	12	63	198	65	42	23
15	11	10	8.0	7.7	6.6	5.2	13	86	198	63	39	22
16	12	9.8	7.0	7.7	6.5	5.3	14	103	188	60	39	21
17	13	9.6	6.7	7.6	6.3	5.5	17	108	182	57	39	21
18	18	9.8	6.9	7.5	5.6	6.1	18	108	176	57	39	21
19	15	10	7.1	7.2	5.8	6.2	19	119	167	54	39	21
20	14	9.8	7.1	7.6	5.7	6.5	20	141	152	53	39	20
21	13	10	7.2	7.6	5.5	6.9	21	141	144	52	39	20
22	17	9.7	7.4	7.8	5.3	7.1	22	135	141	51	34	19
23	19	9.4	7.5	7.9	5.5	7.6	24	144	132	48	32	19
24	21	9.7	7.6	7.8	5.5	7.2	26	152	132	50	30	19
25	14	10	7.8	7.8	5.5	8.0	32	173	127	54	28	18
26	16	11	8.0	7.7	5.3	8.0	32	201	121	54	28	19
27	12	10	8.0	7.7	5.0	8.0	35	217	119	51	29	22
28	12	9.6	8.0	7.5	4.6	8.3	32	214	127	56	28	21
29	12	9.7	8.0	7.3	4.2	8.7	35	211	127	51	27	22
30	13	9.8	7.8	7.1	4.1	8.4	32	241	116	51	29	23
31	12	..	7.7	6.9	..	8.0	..	241	..	51	35	..
Total	422	312.2	259.2	231.7	177.0	185.6	532.8	3433	4929	2029	1278	698
Mean.	13.6	10.4	8.36	7.47	6.10	5.99	17.8	111	164	65.5	41.2	23.3
Max.	21	13	10	7.9	7.3	8.7	35	241	231	108	68	34
Min..	11	9.4	6.7	6.8	4.2	4.3	7.8	31	116	48	27	18
Acre-ft.	837	619	514	460	351	368	1060	6810	9780	4020	2530	1380

Total run-off for water year 1935-36=28,730 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of St. Louis Creek Near Fraser, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	12	8.3	11	8.5	7	5.5	8.3	10	56	154	60	42
2....	12	9.0	11	8.0	7	5.5	7.6	9.0	52	149	56	31
3....	12	19	12	8.0	7.5	5.5	8.3	7.6	53	172	52	29
4....	10	18	14	8.0	8.0	6.0	7.6	6.9	60	154	50	28
5....	10	14	13	8.5	7.0	6.0	6.9	11	70	140	49	27
6....	10	18	11	9.0	6.0	6.0	7.0	11	84	132	46	26
7....	9.6	20	11	9.5	5.5	6.0	7.0	11	93	130	44	28
8....	9.6	17	11	9.5	6.0	6.0	6.9	9.6	108	130	44	32
9....	8.3	17	11	10	8.0	6.0	6.2	11	137	128	43	31
10....	8.3	14	10	10	7.0	6.0	9.0	14	167	130	42	28
11....	8.3	13	9.5	9.5	8.0	6.5	8.3	14	193	132	38	26
12....	8.3	17	9.0	9.0	8.0	7.0	8.3	17	214	125	37	25
13....	9.0	19	9.0	9.0	8.0	7.5	9.6	19	229	113	35	24
14....	8.3	22	10	9.0	8.0	8.0	12	18	258	106	34	24
15....	9.0	22	10	9.0	8.0	9.0	14	19	279	97	33	23
16....	9.0	20	10	9.0	8.5	9.5	9.0	22	275	91	36	22
17....	11	20	10	9.0	8.0	9.5	9.0	24	215	97	38	22
18....	10	12	10	9.0	8.0	9.0	11	24	165	93	34	21
19....	10	14	10	9.0	7.5	8.5	12	19	185	91	31	21
20....	9.6	14	9.5	9.0	7.0	8.5	14	17	195	91	31	20
21....	10.0	18	10	9.0	5.5	8.5	14	18	220	88	30	20
22....	10	18	9.5	9.0	5.0	8.5	14	22	216	86	29	20
23....	10	18	9.0	8.5	4.5	9.0	12	28	204	82	30	20
24....	10	14	9.0	8.5	5.0	8.5	11	31	202	73	34	20
25....	9.6	13	9.0	8.5	5.0	8.5	12	37	196	70	36	20
26....	9.6	13	9.0	8.5	5.5	10	13	42	192	65	34	21
27....	10	13	9.0	8.5	5.5	12	18	46	190	60	31	24
28....	11	14	9.0	8.0	5.5	11	13	55	175	58	29	22
29....	9.6	13	9.0	8.0	... .	16	14	52	164	63	28	23
30....	12	12	9.0	7.5	... .	9.0	12	58	164	82	28	22
31....	8.3	... .	8.5	7.5	... .	9.6	... .	68	70	31	... .	... .
Total	304.4	473.3	312.0	271.0	189.5	252.1	315.0	751.1	5011	3252	1173	742
Mean.	9.82	15.8	10.1	8.74	6.77	8.13	10.5	24.2	167	105	37.8	24.7
Max.	12	22	14	10	8.5	16	18	68	279	172	60	42
Min.	8.3	8.3	8.5	7.5	4.5	5.5	6.2	6.9	52	58	28	20
Acre-ft.	604	939	619	538	376	500	625	1490	9940	6450	2330	1470

Total run-off for water year 1934-35=25,880 acre-feet.

Discharge of St. Louis Creek Near Fraser, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	20	20	7.5	12	9	8.5	8.5	32	223	114	70	41
2....	19	17	8	12	9	9	8	36	189	104	65	38
3....	18	14	8.5	11	9	9	7.7	46	163	102	65	38
4....	18	16	8.5	12	8.5	9.5	7.5	56	158	96	61	36
5....	18	14	9	11	8.5	9.6	8	69	148	90	60	34
6....	17	14	9	12	8.5	10	7	67	135	86	61	32
7....	17	14	9.5	12	8.5	10	8.5	58	148	86	58	32
8....	17	13	8.5	12	9	10	9	48	176	82	55	31
9....	17	14	9	12	8.7	11	8.5	43	187	86	53	30
10....	17	13	7.5	12	9.5	10	10	42	192	88	52	30
11....	17	12	9.5	12	9	10	11	43	195	116	53	31
12....	17	12	8.5	12	9.5	10	12	52	203	123	62	29
13....	16	12	10	12	8.5	10	13	55	214	96	54	29
14....	16	13	8	12	8.5	10	14	64	214	86	49	28
15....	16	14	6.5	12	8.5	10	14	83	206	85	47	27
16....	16	12	6	12	8.5	10	17	93	200	83	47	27
17....	17	12	6.5	11	7.5	10	22	96	195	82	47	27
18....	18	12	6.5	11	8	9	23	100	195	85	47	27
19....	18	13	7	10	8	10	20	108	187	79	47	25
20....	18	12	7.5	10	7.5	10	20	123	174	73	48	24
21....	17	12	7.5	10	8	10	19	128	163	70	49	24
22....	20	11	8.5	10	10	8.5	24	128	169	67	43	24
23....	19	10	9	10	9	8	26	130	156	64	40	23
24....	22	11	9.5	10	7.5	9	28	135	150	61	39	23
25....	19	12	10	10	7.5	9.5	31	150	150	66	37	22
26....	17	12	12	10	7.5	8.5	32	171	143	69	36	22
27....	19	11	12	10	8.5	9	34	182	135	62	36	23
28....	18	10	11	10	10	9.5	34	182	135	65	36	25
29....	17	9	10	9.5	9.5	9.5	36	187	145	65	34	26
30....	16	8	11	9	... .	9	36	214	128	65	36	27
31....	16	... .	12	8.5	... .	9.5	... .	235	... .	65	42	... .
Total	547	379	273.5	339.0	249.2	295.6	548.7	3156	5176	2561	1529	855
Mean.	17.6	12.6	8.82	10.9	8.59	9.54	18.3	102	173	82.6	49.3	28.5
Max.	22	20	12	12	10	11	36	235	223	123	70	41
Min.	16	8	6	8.5	7.5	8	7	32	128	61	34	22
Acre-ft.	1080	752	542	672	494	586	1090	6260	10270	5080	3030	1700

Total run-off for water year 1935-36=31,560 acre-feet.

Discharge of Ranch Creek Near Fraser, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.9	4.4	4.5	4.0	2.5	2.5	2.5	7.2	54	119	26	13
2	4.6	3.9	4.0	3.5	2.0	2.5	2.4	6.4	49	109	23	11
3	4.6	6.4	5.0	3.5	1.5	2.5	2.4	7.2	52	114	21	9.9
4	4.2	6.0	6.0	3.0	1.5	2.5	2.2	8.7	54	109	20	9.6
5	4.2	5.3	5.5	3.0	1.5	2.5	2.2	11	65	102	19	9.6
6	4.0	8.5	5.0	3.0	1.5	2.5	2.0	9.3	75	96	19	9.3
7	3.7	8.0	4.5	3.5	1.5	2.5	2.0	10	85	81	18	11
8	3.7	7.4	5.0	3.5	2.0	2.5	2.2	9.0	95	91	19	14
9	2.5	7.2	5.0	3.5	3.0	2.5	2.5	10	109	84	19	12
10	1.3	6.0	5.0	3.5	3.5	2.5	2.8	11	130	80	17	10
11	1.2	6.2	4.5	3.5	3.5	2.5	2.5	12	165	76	16	9.6
12	1.3	7.2	5.0	4.0	3.0	3.0	6.7	13	188	74	15	8.7
13	2.5	8.5	5.5	4.0	2.5	3.0	5.7	16	207	67	14	8.5
14	3.9	8.2	5.5	4.0	3.0	3.0	3.7	14	231	67	14	8.5
15	3.7	7.4	6.0	4.0	3.0	3.5	4.4	15	248	55	13	8.2
16	3.9	6.9	5.5	4.0	2.5	3.5	6.2	17	215	48	18	8.0
17	4.0	6.2	5.5	4.0	2.0	3.0	4.2	20	186	50	20	7.7
18	4.2	4.4	5.5	4.0	3.5	1.5	5.3	22	185	49	14	7.4
19	4.0	5.5	5.0	4.0	3.5	1.5	6.9	16	190	47	13	7.2
20	4.0	6.7	5.0	4.0	3.5	1.5	6.9	15	200	44	13	7.2
21	3.9	5.5	5.0	4.0	2.0	1.5	8.5	16	210	44	12	7.2
22	4.6	5.5	5.0	4.0	2.5	2.0	6.9	17	212	44	12	7.2
23	4.9	4.6	4.5	4.0	2.5	2.1	5.7	22	200	40	12	7.2
24	5.1	5.1	4.5	4.0	2.5	1.8	9.9	25	185	37	13	7.4
25	3.9	5.5	4.5	4.0	2.5	1.8	47	26	170	33	14	7.4
26	4.0	4.6	5.0	4.0	2.5	2.0	41	30	155	28	13	8.2
27	5.1	4.0	5.0	4.0	2.5	2.1	19	33	138	27	12	9.0
28	4.9	6.5	4.5	3.5	2.5	4.6	9.6	40	125	26	12	8.5
29	4.2	7.0	4.5	3.0	...	2.7	11	43	126	32	11	8.5
30	5.7	5.0	4.5	4.0	...	2.5	8.0	53	124	33	11	7.7
31	6.4	...	4.0	3.0	...	2.4	...	62	...	29	11	...
Total	123.1	183.6	153.5	115.0	70.0	76.5	242.3	616.8	4428	1935	484	268.7
Mean.	3.97	6.12	4.95	3.71	2.50	2.47	8.07	19.9	148	62.4	15.6	8.96
Max..	6.4	8.5	6.0	4.0	3.5	4.6	47	62	248	119	26	14
Min...	1.2	3.9	4.0	3.0	1.5	1.5	2.0	6.4	49	26	11	7.2
Acre-ft.	244	364	304	228	139	152	481	1220	8780	3840	960	533

Total run-off for water year 1934-35=17,240 acre-feet.

Discharge of Ranch Creek Near Fraser, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.1	9.0	4.8	4.6	3.9	3.9	3.8	28	166	41	22	16
2	6.9	8.8	4.2	4.8	3.8	3.9	3.8	32	146	37	20	15
3	6.7	8.0	3.9	4.6	3.8	3.9	3.8	44	135	35	22	16
4	6.9	10	4.2	4.2	3.8	3.9	3.8	54	126	34	24	14
5	6.9	9.6	4.6	4.1	3.7	3.9	3.8	70	114	33	22	14
6	6.7	7.4	4.8	3.8	3.9	4.1	3.7	67	108	31	24	13
7	6.4	7.4	6.2	3.5	3.9	4.1	3.9	60	114	29	22	13
8	6.7	7.4	5.6	3.5	3.9	4.1	3.9	51	123	28	22	13
9	6.4	7.4	5.4	3.9	3.8	4.1	3.9	44	123	29	20	13
10	6.4	7.4	5.0	3.9	3.8	4.1	4.1	44	127	31	20	12
11	6.4	7.3	5.0	3.8	3.8	3.9	4.8	43	128	43	20	13
12	6.0	7.0	4.8	3.8	3.9	3.9	7.4	47	129	51	26	12
13	6.0	6.8	4.8	3.7	4.1	3.9	8.5	55	132	36	27	12
14	5.8	6.7	4.6	3.8	3.9	4.1	10	68	132	31	23	11
15	5.8	6.7	4.4	3.9	3.8	4.1	11	87	128	28	22	11
16	6.2	8.5	4.4	4.1	3.8	3.9	13	102	125	28	22	11
17	7.1	6.7	4.4	3.9	3.9	3.8	16	113	119	25	23	11
18	11	6.4	4.6	3.8	4.2	3.9	18	114	114	24	24	10
19	9.3	6.4	4.8	3.7	4.1	4.0	22	120	107	23	23	9.8
20	7.8	6.4	5.0	3.8	3.9	3.9	22	127	98	23	24	9.8
21	7.4	6.4	5.2	3.9	3.9	3.9	21	132	91	22	22	9.3
22	10	6.2	5.2	3.8	3.9	3.9	27	131	88	21	20	9.0
23	10	6.2	5.2	3.8	3.9	3.9	28	135	81	19	18	9.0
24	11	6.2	5.2	3.9	4.1	3.8	31	141	73	18	18	8.8
25	9.0	6.2	5.2	3.9	4.1	3.8	32	150	71	18	17	8.8
26	9.0	6.2	5.0	3.6	3.9	3.8	32	159	68	18	16	8.8
27	8.0	6.2	4.8	3.7	3.9	3.8	31	171	56	18	16	9.6
28	8.0	5.8	4.8	3.8	3.9	3.8	32	170	52	29	16	11
29	8.5	6.0	4.8	3.8	3.9	3.9	32	168	55	24	15	12
30	9.0	5.4	4.4	3.8	...	3.9	29	179	46	22	16	12
31	9.0	4.6	4.0	3.8	3.9	3.9	175	...	22	18	...	...
Total	237.4	212.1	149.9	121.2	113.2	121.8	466.2	3081	3175	871	644	347.9
Mean.	7.66	7.07	4.84	3.91	3.90	3.93	15.5	99.4	106	28.1	20.8	11.6
Max..	11	10	6.2	4.8	4.2	4.1	32	179	166	51	27	16
Min...	5.8	5.4	3.9	3.5	3.7	3.8	3.7	28	46	18	15	8.8
Acre-ft.	471	421	297	240	225	242	925	6110	6300	1730	1280	690

Total run-off for water year 1935-36=18,930 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Ranch Creek Near Tabernash, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	8.6	6.0	8	6	5.5	6.5	9	18	118	182	39	18
2....	8.6	7.1	7.5	6	5.5	7	11	16	109	166	36	15
3....	8.3	6.8	8	5.5	5.5	7	12	14	113	180	32	14
4....	7.6	7.6	9	5.5	5.5	6.5	11	14	120	162	32	13
5....	7.3	9.3	8	5.5	5	6	10	15	123	143	30	13
6....	7.3	11	7.5	5.5	5	5.5	9	19	164	134	28	13
7....	7.1	14	7.5	6	5	5.5	8	20	206	136	28	15
8....	6.8	13	8	6	5.5	5.5	9	22	220	134	28	21
9....	6.6	13	7.5	6	6	5.5	11	20	235	116	26	20
10....	5.3	9.6	7	6	6.5	6	10	22	264	107	24	15
11....	4.9	9.3	7	6	6	6	9	23	288	109	24	13
12....	4.7	13	7.5	6	5.5	6	11	25	308	111	23	12
13....	4.9	12	7.5	6	5.5	6	13	33	336	86	21	11
14....	6.0	12	7.5	6	5.5	6	16	33	361	86	20	11
15....	6.6	13	8	6	6	6	18	31	382	89	20	10
16....	6.8	13	8	6	6	6	19	32	341	60	22	9.6
17....	6.8	15	7.5	6	5.5	6	21	43	268	78	35	8.6
18....	6.8	9.6	7	6	5.5	6	25	73	252	70	24	8.3
19....	6.6	11	7	6	6	6	35	55	240	61	20	7.9
20....	6.6	13	7	6	6.5	6	30	50	252	58	18	7.6
21....	6.0	9.6	7.5	6	6.5	6	27	52	262	58	18	7.6
22....	6.0	10	8	6	6.5	6	23	52	268	67	18	7.9
23....	6.0	9.6	7	6	7	6	22	62	262	67	18	7.9
24....	6.0	11	7	6	6	6	17	67	256	53	20	8.3
25....	6.6	10	6.5	6	5	6	14	70	248	52	24	8.3
26....	6.6	9.6	6	6	4.5	6.5	16	78	238	41	22	8.3
27....	5.8	9.3	5.5	6	4.5	6	18	81	230	38	18	13
28....	6.0	10	5.5	6	5.5	4	24	94	220	36	16	11
29....	6.6	9.0	5.5	6	4.5	5.5	21	99	200	40	16	11
30....	5.8	8.5	5.5	6	4.5	6	22	122	192	56	15	10
31....	6.6	5.5	6	7.5	5.5	134	44	44	16	16	16	16
Total	202.2	314.9	221.5	184	158.5	186.5	501	1489	7076	2820	731	349.3
Mean.	6.52	10.5	7.15	5.94	5.66	6.02	16.7	48.0	236	91.0	23.6	11.6
Max..	8.6	15	9	6	7	7.5	35	134	382	182	39	21
Min...	4.7	6.0	5.5	5.5	4.5	4	8	14	109	36	15	7.6
Acre-ft.	401	625	439	365	314	370	994	2950	14040	5590	1450	693

Total run-off for water year 1934-35=28,230 acre-feet.

Discharge of Ranch Creek Near Tabernash, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	9.3	15	....	....	....	....	....	76	336	60	39	26
2....	9.0	14	....	....	....	....	....	80	277	54	37	23
3....	9.0	12	....	....	....	....	....	95	250	49	44	24
4....	9.0	12	*8	....	....	....	*4.2	135	222	48	55	23
5....	9.0	15	....	....	....	....	....	152	202	45	40	21
6....	8.6	13	....	....	....	....	....	145	180	44	41	20
7....	8.6	11	....	....	....	*5.3	....	132	180	44	39	19
8....	8.3	16	....	....	....	....	....	115	202	42	35	18
9....	8.6	16	....	*10	....	....	....	108	216	41	33	18
10....	8.6	11	....	....	*7.2	....	....	109	216	48	32	18
11....	8.6	10	....	....	....	....	....	115	216	78	39	20
12....	8.6	10	....	....	....	....	....	128	214	114	43	18
13....	8.6	10	....	....	....	....	....	151	220	67	44	18
14....	8.6	11	....	....	....	....	....	190	220	51	36	16
15....	8.6	12	....	....	....	....	....	233	208	52	33	16
16....	8.6	12	....	....	....	....	....	272	194	58	31	15
17....	11	10	....	....	....	....	....	266	178	56	35	15
18....	11	11	....	....	....	....	....	270	166	44	40	15
19....	12	12	....	....	....	....	....	272	156	41	34	14
20....	14	12	....	....	....	....	....	292	145	40	36	14
21....	12	11	....	....	....	....	....	299	131	38	34	14
22....	12	10	....	....	....	....	....	286	123	36	33	13
23....	14	10	....	....	....	....	....	281	113	31	29	13
24....	11	9	....	....	....	....	....	297	104	29	28	13
25....	11	9	....	....	....	....	....	299	109	28	26	13
26....	13	10	....	....	....	....	....	330	102	33	25	13
27....	13	10	....	....	....	....	....	363	86	34	25	13
28....	16	9	....	....	....	....	....	368	79	54	24	17
29....	16	8	....	....	....	....	....	330	94	41	24	19
30....	14	8	....	....	....	....	....	352	73	41	23	20
31....	11	....	....	....	....	....	....	352	....	36	25	....
Total	330.6	339	....	....	....	....	....	6893	5212	1477	1062	519
Mean.	10.7	11.3	9	9	6.5	5.5	32	222	174	47.6	34.3	17.3
Max..	16	16	....	....	....	....	....	368	336	114	55	26
Min...	8.3	8	....	....	....	....	....	76	73	28	23	13
Acre-ft.	656	672	553	553	374	338	1900	13670	10340	2930	2110	1030

Total run-off for water year 1935-36=35,130 acre-feet.

*Discharge measurement.

Discharge of Meadow Creek Near Tabernash, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1									108	15	8.0	4.9
2									68	14	8.4	3.6
3									56	13	10	3.6
4									56	14	13	2.6
5									40	13	10	1.9
6									40	12	13	2.2
7									50	12	9.3	2.2
8									74	12	7.1	1.9
9									69	11	6.2	1.6
10									61	13	6.2	1.9
11									60	16	9.8	2.9
12									59	40	8.4	1.9
13									65	19	7.5	2.6
14									61	16	4.9	2.2
15									54	12	4.5	1.9
16									48	17	4.1	1.3
17									43	10	5.4	1.6
18									41	9.8	9.8	1.6
19									38	9.3	7.1	1.3
20									35	7.5	6.6	1.0
21									29	7.1	6.2	1.3
22									29	6.2	4.9	1.3
23									25	8.0	4.1	1.3
24									22	8.0	3.2	1.3
25									25	7.1	2.6	.6
26									19	7.5	2.9	1.0
27									126	18	8.4	2.9
28									121	18	16	4.1
29									117	18	12	6.2
30									127	16	11	6.6
31									123	7.5	4.1	
Total									614	1345	384.4	197.9
Mean.									May 27	44.8	12.4	70.6
Max..									to 31	108	40	6.38
Min..										16	6.2	.6
Acre-ft.										1220	2670	762
											393	140

Total run-off for period=5,180 acre-feet.

Discharge of Strawberry Creek Near Granby, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1									32	8.6	9.6	2.8
2									27	8.1	10	1.1
3									22	8.1	11	1.4
4									18	6.7	10	0.9
5									17	4.5	9.6	2.3
6									15	.2	10	1.9
7									13	2.3	9.1	1.6
8									13	9.1	7.6	1.4
9									15	8.6	6.2	1.1
10									13	11	4.5	1.4
11									12	19	6.7	2.8
12									13	18	8.6	1.9
13									15	11	7.2	1.4
14									14	9.1	5.3	1.4
15									14	8.6	4.0	0.9
16									13	9.1	3.2	0.9
17									12	8.6	4.5	0.9
18									13	8.6	6.2	0.6
19									14	9.1	5.8	0.9
20									14	8.1	5.3	0.6
21									13	7.2	5.3	0.5
22									12	7.2	4.9	0.5
23									13	4.9	3.2	0.6
24									12	3.6	2.3	0.6
25									14	3.2	1.6	0.9
26									14	5.3	1.4	0.9
27									14	6.2	1.6	0.9
28									48	13	8.1	2.3
29									43	14	6.7	0.9
30									38	11	6.2	0.6
31									36	6.7	1.4	
Total									165	449	241.7	169.2
Mean.									May 28	15.0	7.80	1.45
Max..									to 31	32	19	4.0
Min..										11	2	.5
Acre-ft.										327	891	479
											336	86

Total run-off for period=2,120 acre-feet.

Unless otherwise noted all discharges are in cubic feet per second.

**Discharge of Williams Fork River Below Steelman Creek, Colorado, for Year
Ending Sept. 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	6.7	4.7	....	....	....	....	2.6	3.0	39	113	60	30
2....	6.7	4.7	....	....	....	....	3.0	3.1	32	118	55	21
3....	6.7	4.5	....	....	....	....	3.9	3.1	37	135	53	18
4....	6.2	4.4	....	....	....	....	4.1	3.0	50	115	50	17
5....	5.7	4.4	....	....	....	....	3.9	3.0	61	105	46	15
6....	5.7	4.2	....	....	....	....	3.8	3.0	73	98	43	15
7....	5.7	4.4	....	....	....	....	3.6	3.0	81	105	43	22
8....	5.4	4.7	....	....	....	....	3.6	3.0	100	100	38	25
9....	5.4	4.5	....	....	....	....	3.8	2.7	124	103	34	21
10....	5.4	4.4	....	....	....	....	3.8	3.3	165	100	31	18
11....	5.2	4.2	....	....	....	....	3.8	3.4	186	94	29	16
12....	5.4	4.1	....	....	....	....	3.8	3.9	214	89	27	14
13....	5.2	4.1	....	....	....	....	3.6	4.4	231	79	26	13
14....	4.7	4.2	....	....	....	....	3.6	4.4	254	79	25	12
15....	4.7	4.7	....	....	....	....	3.4	5.2	270	70	23	12
16....	5.2	5.4	....	....	....	....	3.3	7.7	231	65	27	12
17....	5.7	4.7	....	....	....	....	3.4	9.4	165	78	25	11
18....	5.2	4.7	....	....	....	....	3.3	9.4	142	72	23	10
19....	4.9	4.4	....	....	....	....	3.4	7.7	150	73	21	9.8
20....	4.7	4.7	....	....	....	....	3.8	6.2	184	70	19	9.4
21....	5.4	4.5	....	....	....	....	4.2	6.5	217	70	18	9.1
22....	6.0	4.2	....	....	....	....	3.1	8.4	217	76	18	9.1
23....	6.5	4.4	....	....	....	....	3.1	9.1	212	73	18	9.1
24....	6.5	4.4	....	....	....	....	3.1	12	175	64	22	9.1
25....	4.2	4.2	....	....	....	....	3.3	14	152	59	25	9.1
26....	5.4	4.0	....	....	....	*2.0	3.1	21	142	57	22	10
27....	5.7	4.2	....	....	....	....	3.0	30	142	52	19	12
28....	6.0	3.8	....	....	....	....	3.0	34	118	51	18	12
29....	5.7	4.2	....	....	....	....	3.0	35	118	65	16	11
30....	7.4	4.0	....	....	....	....	3.0	43	122	83	16	10
31....	8.0	....	....	....	....	....	....	53	....	68	21	....
Total	177.3	132.0	....	....	....	....	103.4	357.9	4404	2579	911	421.7
Mean	5.72	4.40	3.0	2.7	2.4	2.0	3.45	11.5	147	83.2	29.4	14.1
Max.	8.0	5.4	....	....	....	....	4.2	53	270	135	60	30
Min.	4.2	3.8	....	....	....	....	2.6	2.7	32	51	16	9.1
Acre-ft.	352	262	184	166	133	123	205	710	8740	5120	1810	836

Total run-off for water year 1934-35=18,640 acre-feet.

**Discharge of Williams Fork River Below Steelman Creek, Colorado, for Year
Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	9.4	5.8	4.8	3.1	2.8	3.1	2.8	27	170	83	51	24
2....	8.8	5.7	4.4	2.9	2.8	3.1	2.8	33	142	75	44	21
3....	8.8	5.5	4.3	3.0	2.8	3.1	2.8	39	120	70	44	21
4....	8.4	5.4	4.4	2.9	2.8	3.1	2.8	46	111	66	39	19
5....	8.4	5.3	4.5	3.0	2.6	3.0	2.8	53	98	61	43	18
6....	8.0	6.0	4.5	3.0	2.5	3.0	2.8	55	87	59	43	16
7....	8.0	6.1	4.4	2.9	2.4	2.9	3.1	43	95	63	39	16
8....	7.7	5.9	4.3	2.8	2.4	2.8	2.9	37	110	58	35	15
9....	7.7	6.0	4.0	2.9	2.4	2.6	3.1	30	140	63	32	14
10....	7.4	6.1	3.7	2.9	2.4	2.6	3.2	26	155	64	31	16
11....	7.4	4.8	3.5	2.9	2.6	2.8	3.2	27	157	86	39	18
12....	7.4	5.2	3.4	2.9	2.8	2.7	3.3	33	159	84	56	14
13....	7.0	5.7	3.5	2.9	2.8	2.6	3.4	41	160	69	48	16
14....	7.0	5.5	3.5	2.9	2.8	2.6	3.4	55	165	63	42	14
15....	6.7	5.3	3.3	2.8	2.8	2.6	3.5	79	170	59	38	13
16....	6.5	5.4	3.1	2.6	2.8	2.7	3.7	91	170	56	39	12
17....	6.7	5.6	3.2	2.6	2.8	2.8	3.9	91	162	56	38	12
18....	10	5.5	3.3	2.7	2.8	2.8	4.0	93	160	57	35	12
19....	8.4	5.4	3.4	2.9	2.8	2.7	4.4	109	142	56	38	12
20....	6.7	5.2	3.5	2.9	2.8	2.7	5.2	122	138	50	39	11
21....	5.7	5.2	3.5	2.7	2.8	2.4	7.0	120	122	47	40	10
22....	7.7	5.4	3.5	2.9	2.8	2.2	10	115	124	44	34	9.8
23....	7.4	5.3	3.6	2.8	2.6	2.5	16	120	120	40	30	9.4
24....	7.4	5.2	3.6	2.8	2.8	2.6	22	128	115	39	27	9.1
25....	7.0	5.0	3.7	2.8	2.9	2.8	26	140	109	45	25	8.8
26....	6.7	4.9	3.6	2.8	3.0	2.9	29	155	115	47	23	8.8
27....	6.0	4.9	3.7	2.8	3.0	2.8	28	155	111	40	24	9.4
28....	5.9	4.9	3.5	2.8	3.0	2.8	27	152	107	39	22	11
29....	6.1	4.6	3.2	2.8	3.0	2.7	28	165	115	37	20	13
30....	5.9	4.9	3.1	2.8	....	2.8	29	192	102	35	21	13
31....	5.7	....	3.2	2.8	....	2.7	192	....	40	27	....	....
Total	227.9	161.7	115.2	88.3	79.6	85.5	289.1	2764	3951	1751	1106	416.3
Mean	7.35	5.39	3.72	2.85	2.74	2.76	9.64	89.2	132	56.5	35.7	13.9
Max.	10	6.1	4.8	3.1	3.0	3.1	29	192	170	86	56	24
Min.	5.7	4.6	3.1	2.6	2.4	2.2	2.8	26	87	35	20	8.8
Acre-ft.	452	321	228	175	158	170	573	5480	7840	3470	2190	826

Total run-off for water year 1935-36=21,880 acre-feet.

Discharge of Williams Fork River Near Leal, Colorado, for Year Ending Sept. 30, 1935												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	26	21	19	18	16	17	38	201	445	155	100
2	35	28	21	19	18	17	19	34	169	415	147	75
3	35	23	21	18	18	17	18	29	175	495	147	66
4	33	28	20	19	18	16	18	28	222	415	144	62
5	30	27	20	18	18	16	17	30	270	368	138	59
6	29	26	19	17	18	15	17	35	310	346	130	54
7	27	26	19	17	18	15	17	33	331	332	136	69
8	27	25	19	17	18	15	18	34	382	323	130	89
9	27	26	18	17	18	15	17	39	468	318	117	78
10	27	28	20	18	18	15	16	43	580	314	104	66
11	27	27	20	18	17	15	17	44	660	300	100	59
12	27	27	19	18	16	15	19	54	765	287	93	58
13	26	26	18	18	16	15	21	67	835	244	84	51
14	26	24	18	18	16	15	28	61	944	260	80	51
15	26	25	19	18	15	16	34	63	1030	236	77	48
16	26	26	19	18	16	17	38	70	966	214	82	47
17	27	25	19	18	16	17	33	81	715	236	95	45
18	27	26	19	18	16	17	30	79	615	228	78	42
19	27	23	19	17	16	17	35	72	660	220	71	40
20	26	26	19	16	17	17	41	67	725	214	68	40
21	26	25	19	16	17	17	41	67	770	207	64	40
22	26	22	19	17	17	17	44	70	765	207	64	40
23	26	23	20	17	16	17	41	81	735	204	66	40
24	24	23	20	17	16	17	38	101	705	179	71	35
25	26	22	19	18	16	16	26	116	630	167	82	35
26	24	21	19	18	15	16	35	134	585	164	82	40
27	23	22	18	18	15	17	38	175	585	152	69	51
28	24	20	18	18	16	17	35	194	530	150	64	45
29	25	22	18	18	17	17	39	182	486	155	62	48
30	23	21	19	18	17	18	40	211	482	185	61	47
31	23	18	18	17	17	17	17	255	170	64	..	..
Total	841	739	594	549	469	504	847	2587	17296	8150	2925	1620
Mean.	27.1	24.6	19.2	17.7	16.8	16.3	28.2	83.5	577	263	94.4	54.0
Max..	36	28	21	19	18	18	44	255	1030	495	155	100
Min...	23	20	18	16	15	15	16	28	169	150	61	35
Acre-ft.	1670	1470	1180	1090	930	1000	1680	5130	34310	16170	5800	3210

Total run-off for water year 1934-35=73,640 acre-feet.

Discharge of Williams Fork River Near Leal, Colorado, for Year Ending Sept. 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	39	28	21	21	21	18	138	762	276	148	95
2	41	37	27	20	21	21	19	151	641	252	126	77
3	41	36	27	21	21	21	19	196	539	237	123	79
4	43	34	28	20	21	21	19	268	498	218	123	74
5	43	33	28	21	19	21	19	305	449	196	121	68
6	43	39	28	20	19	20	19	317	397	186	136	67
7	43	41	28	19	19	19	20	225	444	190	121	63
8	41	37	27	18	18	19	18	186	570	179	112	60
9	39	39	23	19	19	19	19	159	624	196	108	58
10	39	39	22	20	20	18	19	146	635	203	101	58
11	37	29	21	22	21	18	19	146	635	280	108	67
12	37	33	21	21	21	17	23	168	646	309	176	61
13	39	34	23	21	21	17	26	196	680	244	138	60
14	36	36	22	21	21	17	44	244	692	214	116	55
15	34	32	21	20	21	17	65	339	630	207	110	50
16	36	33	20	19	20	18	77	397	597	196	105	49
17	41	36	21	19	20	18	93	397	570	203	112	47
18	40	37	21	20	20	18	108	402	554	196	108	49
19	44	34	22	21	20	17	112	430	534	196	108	49
20	46	33	22	21	20	17	123	498	483	203	123	49
21	43	31	22	20	20	16	114	503	449	186	123	44
22	40	32	22	21	20	14	128	468	458	176	110	43
23	40	33	22	21	19	15	136	493	420	159	97	43
24	40	32	22	21	19	16	138	498	383	148	89	41
25	39	32	22	21	20	17	156	565	361	143	83	41
26	41	31	23	21	20	19	159	652	370	140	81	40
27	43	31	22	21	20	18	156	646	379	136	83	43
28	39	31	23	21	20	18	146	646	348	130	83	52
29	40	29	22	21	21	17	156	635	365	123	74	55
30	39	31	21	21	17	18	151	762	348	121	74	57
31	36	21	21	17	17	17	17	798	119	91	..	..
Total	1246	1024	722	634	582	559	2319	11974	15461	5962	3411	1694
Mean.	40.2	34.1	23.3	20.5	20.1	18.0	77.3	386	515	192	110	56.5
Max..	46	41	28	22	21	21	159	798	762	309	176	95
Min...	34	29	20	18	18	14	18	138	348	119	74	40
Acre-ft.	2470	2030	1430	1260	1150	1110	4600	23750	30670	11830	6770	3360

Total run-off for water year 1935-36=90,430 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Williams Fork River Near Parshall, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	28	.....	.....	.....	28	52	108	330	495	152	146
2	56	32	.....	.....	.....	28	56	98	294	440	136	114
3	54	29	.....	.....	.....	28	58	89	291	520	122	96
4	50	34	.....	.....	.....	28	57	87	330	460	114	91
5	46	35	.....	.....	.....	28	56	82	376	402	111	89
6	44	33	.....	.....	.....	26	54	98	445	363	96	86
7	42	33	.....	.....	.....	26	48	98	485	342	93	89
8	42	34	.....	*34	.....	26	54	100	550	342	96	136
9	40	35	.....	.....	.....	26	52	103	680	322	93	139
10	40	36	.....	.....	.....	26	50	111	838	338	86	111
11	38	35	.....	.....	.....	30	46	116	958	322	84	95
12	38	34	.....	.....	.....	30	48	116	1050	318	82	89
13	38	33	.....	.....	.....	30	57	122	1140	272	76	86
14	36	33	.....	.....	.....	30	76	111	1200	250	72	80
15	35	33	.....	.....	.....	30	89	105	1280	246	71	78
16	36	35	.....	.....	.....	29	103	105	1250	210	74	72
17	38	36	.....	.....	.....	29	91	133	1020	210	100	69
18	27	36	.....	.....	.....	29	76	149	544	235	89	68
19	16	36	.....	.....	.....	29	89	130	556	199	89	64
20	17	36	.....	.....	.....	29	105	108	886	228	95	63
21	23	36	.....	.....	*28	32	108	96	964	206	91	64
22	33	36	.....	.....	.....	32	116	111	940	214	79	60
23	33	34	.....	.....	.....	32	105	136	904	221	82	45
24	32	34	.....	.....	.....	32	95	165	850	185	86	35
25	32	34	.....	.....	.....	32	74	189	762	155	96	36
26	32	32	.....	.....	.....	36	68	206	640	146	108	44
27	31	33	.....	.....	.....	40	87	242	640	133	93	72
28	29	30	.....	.....	.....	46	103	318	540	122	86	76
29	29	33	.....	.....	.....	56	103	314	525	122	86	74
30	27	32	.....	.....	.....	62	119	314	515	217	80	69
31	27	.....	.....	.....	.....	56	.....	380	.....	192	87	.....
Total	1117	1010	.....	.....	.....	1021	2295	4640	22383	8430	2905	2436
Mean.	36.0	33.7	32.0	30.0	27.0	32.9	76.5	150	746	272	93.7	81.2
Max..	56	36	.....	.....	.....	62	119	380	1280	520	152	146
Min..	16	28	.....	.....	.....	26	46	82	291	122	71	35
Acre-ft.	2220	2000	1970	1840	1500	2030	4550	9200	44400	16720	5760	4830

Total run-off for water year 1934-35 = 97,020 acre-feet.

Discharge of Williams Fork River Near Parshall, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	66	50	56	51	34	37	26	218	995	343	210	129
2	66	54	54	49	36	37	23	239	869	299	171	102
3	66	50	52	50	34	39	27	316	743	268	167	100
4	66	48	51	51	33	41	26	391	657	260	159	94
5	66	45	52	51	30	39	27	475	612	234	142	87
6	66	51	52	47	30	37	26	523	541	218	171	82
7	66	44	51	40	29	36	29	404	569	202	148	80
8	66	40	50	38	29	35	30	334	668	226	129	78
9	64	40	49	39	30	34	29	277	716	206	126	71
10	63	42	49	41	32	35	30	247	732	264	116	69
11	62	36	50	44	33	36	38	243	743	391	113	82
12	60	40	52	45	33	36	47	281	743	457	218	80
13	60	42	54	41	34	38	64	334	777	356	186	76
14	58	45	48	44	31	39	111	391	788	294	145	71
15	58	37	42	47	34	40	142	532	721	272	126	65
16	64	36	45	45	33	38	171	652	683	234	119	64
17	64	38	36	42	32	35	226	657	668	218	135	64
18	63	38	36	38	31	38	243	705	636	222	129	64
19	66	39	37	32	31	39	260	710	621	218	116	55
20	66	40	38	35	30	39	251	777	555	214	148	47
21	66	42	40	37	30	35	264	788	514	198	142	47
22	58	44	42	37	30	33	299	754	501	182	138	42
23	60	47	43	38	34	33	303	727	497	159	113	37
24	56	48	45	39	35	36	321	738	448	145	102	40
25	57	50	46	38	36	40	334	788	422	142	94	41
26	58	50	47	37	37	39	334	875	422	148	89	41
27	58	52	49	38	37	37	325	881	453	152	87	47
28	54	54	52	39	37	39	308	899	400	145	92	60
29	58	53	50	37	37	39	299	845	418	135	87	67
30	58	55	49	36	35	35	260	953	431	138	82	76
31	52	.....	50	35	29	.....	1020	.....	152	89	.....	.....
Total	1911	1350	1459	1281	952	1143	4873	17974	18543	7092	4089	2058
Mean.	61.6	45.0	47.1	41.3	32.8	36.9	162	580	618	229	132	68.6
Max..	66	55	56	51	37	41	334	1020	995	457	218	129
Min..	52	36	36	32	29	29	23	218	400	135	82	37
Acre-ft.	3790	2680	2890	2540	1890	2270	9670	35650	36780	14070	8110	4080

Total run-off for water year 1935-36 = 124,400 acre-feet.

*Discharge measurement.

Discharge of Blue River at Dillon, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	27	.....	.....	.....	.....	23	41	192	244	202	101
2	38	29	.....	.....	.....	.....	23	43	187	248	174	98
3	38	30	.....	.....	.....	.....	23	43	177	317	154	92
4	38	31	.....	.....	.....	.....	23	39	177	325	152	87
5	37	32	.....	.....	.....	.....	23	37	197	274	147	82
6	37	33	.....	.....	.....	.....	22	35	224	248	135	78
7	37	33	.....	.....	.....	.....	22	39	260	235	130	81
8	37	33	.....	*20	.....	.....	22	40	348	230	126	93
9	37	34	.....	.....	.....	.....	22	41	490	232	118	98
10	37	34	.....	.....	.....	.....	22	44	582	238	110	98
11	37	32	.....	.....	.....	.....	25	52	656	238	108	93
12	37	32	.....	.....	*16	.....	25	57	685	254	108	90
13	32	32	.....	.....	.....	.....	25	65	685	244	106	86
14	32	32	.....	.....	.....	.....	26	74	753	232	101	78
15	31	32	.....	.....	.....	.....	29	75	761	221	97	75
16	31	28	.....	.....	.....	.....	29	75	649	205	95	72
17	31	28	.....	.....	.....	.....	29	78	518	192	98	71
18	31	28	.....	.....	.....	.....	29	93	437	194	101	66
19	31	28	.....	.....	.....	.....	30	97	414	192	103	64
20	31	28	.....	.....	.....	.....	31	95	423	189	98	62
21	31	24	.....	.....	.....	.....	33	87	448	187	93	59
22	31	24	.....	.....	.....	.....	35	84	418	192	92	58
23	30	24	.....	.....	.....	.....	40	84	395	232	89	58
24	30	24	.....	.....	.....	.....	44	93	369	235	90	58
25	30	24	.....	.....	.....	.....	44	117	340	202	103	58
26	30	22	.....	.....	.....	.....	41	130	314	179	126	59
27	27	22	.....	.....	.....	.....	35	147	306	165	141	64
28	26	22	.....	.....	.....	.....	35	162	292	158	131	65
29	25	22	.....	.....	.....	.....	37	170	248	156	117	62
30	25	22	.....	.....	*22	.....	38	172	244	205	108	64
31	27	.....	.....	.....	.....	.....	.....	184	244	101	.....	.....
Total	1011	846	620	589	476	589	885	2593	12189	6907	3654	2270
Mean.	32.6	28.2	20	19	17	19	29.5	83.6	406	223	118	75.7
Max..	39	34	.....	.....	.....	.....	44	184	761	325	202	101
Min..	25	22	.....	.....	.....	.....	22	35	177	156	89	58
Acre-ft.	2010	1680	1230	1170	944	1170	1760	5140	24180	13700	7250	4500

Total run-off for water year 1934-35=64,730 acre-feet.

Discharge of Blue River at Dillon, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	64	43	.....	.....	.....	.....	14	207	745	368	255	124
2	58	40	.....	.....	.....	.....	20	210	692	321	250	124
3	57	39	.....	.....	.....	.....	15	235	582	298	255	122
4	53	39	.....	.....	.....	.....	14	299	518	259	245	118
5	53	35	.....	.....	.....	.....	14	357	468	246	275	109
6	53	34	.....	.....	.....	.....	18	414	423	242	298	104
7	50	33	*22	.....	.....	.....	20	373	404	242	293	100
8	49	35	.....	.....	.....	.....	15	260	423	239	250	97
9	49	35	.....	.....	.....	.....	14	254	490	246	225	94
10	49	33	.....	.....	.....	.....	14	254	523	259	197	91
11	48	31	.....	.....	.....	.....	19	244	600	263	202	90
12	48	30	.....	*25	.....	.....	22	254	607	302	293	96
13	48	30	.....	.....	*23	.....	32	277	621	307	344	97
14	48	32	.....	.....	*24	.....	41	333	621	259	312	96
15	48	34	.....	.....	.....	.....	43	404	600	228	246	94
16	45	32	.....	.....	.....	.....	59	512	582	228	218	86
17	45	30	.....	.....	.....	.....	80	564	570	225	218	82
18	44	30	.....	.....	.....	.....	93	564	552	218	225	81
19	40	32	.....	.....	.....	.....	110	570	552	225	218	78
20	44	32	.....	.....	.....	.....	131	635	512	239	211	76
21	48	30	.....	.....	.....	.....	147	663	467	218	202	74
22	49	27	.....	.....	.....	.....	156	649	450	205	191	72
23	48	25	.....	.....	.....	.....	174	600	450	191	173	70
24	44	25	.....	.....	.....	.....	202	576	445	170	158	68
25	43	26	.....	.....	.....	.....	227	576	445	156	149	66
26	40	28	.....	.....	.....	.....	218	656	484	154	143	65
27	39	26	.....	.....	.....	.....	221	670	506	152	132	65
28	44	24	.....	.....	.....	.....	224	678	439	149	128	65
29	44	22	.....	.....	.....	.....	218	656	418	161	126	65
30	45	20	.....	.....	.....	.....	216	692	413	183	124	67
31	44	.....	.....	.....	.....	.....	.....	761	208	124	.....	.....
Total	1481	932	651	713	696	775	2791	14402	15602	7161	6680	2636
Mean.	47.8	31.1	21	23	24	25	93.0	465	520	231	215	87.9
Max..	64	43	.....	.....	.....	.....	227	761	745	368	344	124
Min..	39	20	.....	.....	.....	.....	14	207	404	149	124	65
Acre-ft.	2940	1850	1290	1410	1380	1540	5540	28570	30950	14200	13250	5230

Total run-off for water year 1935-36=108,200 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Snake River at Dillon, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.4	7.2	.....	.....	.....	.....	7	15	44	233	130	46
2	8.4	7.8	.....	.....	.....	.....	8	13	42	226	118	32
3	8.1	12	.....	.....	.....	.....	8	12	50	359	116	29
4	8.1	10	.....	.....	.....	.....	9	12	71	233	111	27
5	8.1	9.6	.....	.....	.....	.....	10	14	91	202	100	25
6	8.1	12	.....	.....	.....	.....	10	14	121	182	92	21
7	8.1	11	.....	.....	.....	.....	9.6	12	148	174	87	32
8	7.8	10	.....	*7.6	.....	.....	9.0	14	185	167	80	38
9	7.8	11	.....	.....	.....	.....	9.0	16	219	174	85	30
10	7.5	11	.....	.....	.....	.....	8.4	18	341	172	72	24
11	7.5	10	.....	.....	.....	.....	8.4	18	468	188	69	22
12	7.5	10	.....	.....	*12	.....	9.6	20	630	209	68	20
13	7.5	10	.....	.....	.....	.....	12	20	832	164	60	18
14	7.5	10	.....	.....	.....	.....	11	20	741	167	57	18
15	7.5	10	.....	.....	.....	.....	13	18	839	157	53	18
16	7.8	9	.....	.....	.....	.....	14	16	546	141	59	17
17	7.8	9	.....	.....	.....	.....	10	18	371	145	72	14
18	7.8	9	.....	.....	.....	.....	10	21	330	139	64	14
19	7.8	9	.....	.....	.....	.....	14	18	353	132	55	14
20	7.8	9	.....	.....	.....	.....	16	16	413	126	52	13
21	7.8	8	.....	.....	.....	.....	19	14	455	150	48	13
22	8.1	8	.....	.....	.....	.....	18	12	437	177	44	13
23	8.4	8	.....	.....	.....	.....	17	14	401	212	46	13
24	7.5	8	.....	.....	.....	.....	13	15	377	160	47	13
25	7.2	8	.....	.....	.....	.....	16	15	313	139	52	14
26	7.5	7.5	.....	.....	.....	.....	18	20	308	119	47	14
27	7.5	7.5	.....	.....	.....	.....	20	31	296	102	46	16
28	7.8	7.5	.....	.....	.....	.....	18	28	267	100	39	15
29	7.2	7.5	.....	.....	.....	.....	16	28	233	110	36	17
30	8.1	7.5	.....	.....	*6.6	.....	16	35	236	199	35	15
31	7.2	.....	.....	.....	.....	.....	47	47	169	32	.....	.....
Total	241.2	274.1	263.5	248	252	248	377.0	584	10158	5327	2072	615
Mean.	7.78	9.14	8.50	8.00	9.00	8.00	12.6	18.8	339	172	66.8	20.5
Max..	8.4	12	.....	.....	.....	.....	20	47	839	359	130	46
Min..	7.2	7.2	.....	.....	.....	.....	7	12	42	100	32	13
Acre-ft.	478	544	523	492	500	492	748	1160	20150	10570	4110	1220

Total run-off for water year 1934-35=40,990 acre-feet.

Discharge of Snake River at Dillon, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	15	10	11	10	13	7.7	93	601	270	136	68
2	14	12	11	10	9.5	14	10	89	486	238	134	58
3	24	12	11	11	9.2	14	7.7	120	426	212	136	57
4	16	14	11	10	9.0	11	7.5	178	410	195	131	49
5	15	14	12	9.2	9.0	11	7.5	230	363	186	175	46
6	14	14	12	9.2	9.5	10	9.2	246	339	175	199	43
7	14	14	13	12	10	9.5	11	199	394	166	178	39
8	14	14	13	10	9.5	9.9	7.7	146	464	163	158	36
9	14	14	12	9.9	10	9.5	7.5	116	492	180	153	29
10	14	12	13	11	10	9.0	7.7	111	532	166	134	29
11	14	18	9.9	10	10	8.5	9.2	113	538	219	129	36
12	14	19	11	11	12	7.8	11	129	574	238	178	30
13	13	18	9.5	11	11	7.8	16	169	601	180	178	28
14	13	17	11	11	11	8.0	19	238	615	158	138	25
15	13	18	9.0	11	9.9	8.2	23	344	568	150	114	23
16	13	17	9.5	11	10	10	26	384	556	146	113	22
17	13	16	10	11	12	9.6	48	379	550	146	118	19
18	12	16	11	9.9	9.5	8.2	87	379	556	180	111	17
19	13	17	12	9.5	9.5	10	99	405	520	175	111	16
20	13	17	11	9.9	9.9	12	102	459	464	156	116	16
21	13	16	11	9.9	10	8.0	97	464	432	148	108	15
22	14	15	10	9.9	13	8.2	110	415	486	131	97	15
23	12	14	9.5	9.9	14	8.0	110	421	421	118	89	15
24	14	10	11	13	9.6	111	442	405	113	82	14	14
25	14	15	11	10	12	8.0	118	538	421	106	76	14
26	14	16	10	9.9	13	8.0	108	608	415	100	69	13
27	13	15	9.5	12	14	8.5	103	594	389	97	69	13
28	14	13	8.9	9.5	12	7.7	99	538	353	125	68	14
29	14	12	8.6	9.5	12	7.7	103	562	339	113	64	14
30	13	11	9.2	11	....	7.7	94	636	310	113	63	15
31	13	10	8.6	8.6	....	7.5	650	650	110	68	.....	.....
Total	432	449	329.6	319.8	313.5	289.9	1576.7	10395	14020	4973	3693	\$28
Mean.	13.9	15.0	10.6	10.3	10.8	9.35	52.6	335	467	160	119	27.6
Max..	24	19	13	12	14	14	118	650	615	270	199	68
Min..	12	11	8.6	8.6	9.0	7.5	7.5	89	310	97	63	13
Acre-ft.	857	891	654	634	622	575	3130	20620	27810	9860	7320	1640

Total run-off for water year 1935-36=74,610 acre-feet.

*Discharge measurement.

Discharge of Ten Mile Creek at Dillon, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	21					22	39	418	208	162	66
2	24	24					24	34	385	200	118	59
3	24	20					24	31	432	238	98	55
4	26	23					26	32	528	242	106	53
5	30	20					26	33	602	200	106	53
6	27	23					26	35	668	172	100	53
7	26	22					24	35	732	175	104	77
8	26	25		*20			22	34	768	179	94	80
9	25	25					28	33	811	204	87	76
10	25	24					26	41	980	215	73	64
11	24	23					28	53	993	216	73	59
12	24	24					30	62	993	258	74	56
13	25	24					36	65	1010	190	67	54
14	26	23					40	64	980	190	64	53
15	24	23					43	65	922	172	63	50
16	24	22					31	66	663	152	70	50
17	26	21					30	76	448	146	85	48
18	25	20					27	97	400	139	80	48
19	25	20					31	83	448	123	71	46
20	25	20					37	71	522	131	67	45
21	24	20					44	64	472	149	61	45
22	24	20					50	68	428	172	71	46
23	24	24					44	87	396	182	80	44
24	24	22					35	142	377	142	92	44
25	24	22					32	210	337	110	106	46
26	23	21					33	305	320	98	110	50
27	22	21					39	340	303	88	100	60
28	22	21					37	358	262	87	98	55
29	21	21					38	362	223	113	74	61
30	21	21					*15	41	442	227	274	63
31	21							511		200	64	
Total	758	660	682	651	588	558	974	3938	17048	5415	2681	1652
Mean.	24.5	22.0	22	21	21	18	32.5	127	568	175	86.5	55.1
Max.	30	25					50	511	1010	266	162	80
Min.	21	20					22	31	223	87	61	44
Acre-ft.	1500	1310	1350	1290	1170	1110	1930	7810	33810	10740	5320	3280

Total run-off for water year 1934-35=70,620 acre-feet.

Discharge of Ten Mile Creek at Dillon, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53	45					16	262	786	303	258	88
2	50	44					20	278	663	270	186	74
3	48	42					16	405	564	262	186	74
4	48	45					15	533	533	238	155	67
5	48	42					15	640	472	219	162	61
6	47	44					18	635	428	204	197	59
7	45	40	*24				22	452	487	193	158	56
8	45	42					20	350	607	193	133	54
9	44	39					18	282	635	219	123	50
10	42	40					20	258	668	227	126	49
11	42	38					26	311	646	282	179	63
12	42	37		*23			33	438	640	359	175	55
13	44	36					*26	48	538	613	274	208
14	42	34					61	663	613	215	146	50
15	42	36					55	823	586	193	126	48
16	41	34					67	854	591	190	115	45
17	42	32					106	817	548	186	131	45
18	41	32					158	762	522	212	123	44
19	44	34					190	842	502	227	123	44
20	46	34					212	904	452	190	149	44
21	44	32					200	835	419	182	120	43
22	42	30					242	774	438	162	108	43
23	45	28					274	774	424	139	94	43
24	44	28					270	774	400	128	85	42
25	48	30					295	873	396	131	82	42
26	46	32					295	879	487	149	77	42
27	45	30					303	823	405	128	76	42
28	45	26					282	798	382	158	74	46
29	47	24					307	835	373	149	71	46
30	45	22					278	916	346	155	73	46
31	46							897	158	77		
Total	1393	1052	620	651	638	837	3882	20225	15626	6295	4096	1559
Mean.	44.9	35.1	20	21	22	27	129	652	521	203	132	52.0
Max.	53	45					307	916	786	359	258	88
Min.	41	22					15	262	346	128	71	42
Acre-ft.	2760	2090	1230	1290	1270	1660	7700	40120	30990	12490	8120	3090

Total run-off for water year 1935-36=112,800 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of Roaring Fork River at Aspen, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	27	26	26	25	27	29	64	246	400	91	58
2	44	27	27	27	26	27	28	71	250	378	81	45
3	42	28	28	27	30	26	29	60	282	373	71	40
4	42	27	28	26	30	25	30	48	340	350	72	31
5	42	26	27	24	29	24	30	47	400	316	80	27
6	41	28	28	24	30	24	30	44	476	299	69	27
7	41	38	26	26	29	24	29	44	560	309	59	60
8	41	38	24	26	27	26	29	45	645	316	63	83
9	41	38	26	27	29	24	30	45	780	299	59	82
10	41	38	28	26	29	25	30	58	912	280	53	75
11	39	38	27	26	29	25	28	71	967	266	46	68
12	39	38	26	24	27	24	28	90	1030	257	49	62
13	38	34	27	26	26	26	29	100	1120	233	44	59
14	38	34	27	26	25	26	31	96	1170	220	39	55
15	38	34	28	26	25	26	36	96	1200	202	36	50
16	38	34	29	26	24	26	40	102	1090	179	37	50
17	36	32	29	26	25	26	44	124	692	166	43	40
18	36	34	29	26	25	28	44	137	585	171	42	30
19	36	34	29	26	25	28	46	127	698	173	30	30
20	36	32	27	26	24	27	46	112	762	161	28	30
21	35	32	29	25	26	28	46	112	858	140	28	29
22	33	30	27	24	24	29	48	126	792	134	29	37
23	30	29	27	24	24	29	63	134	709	124	30	44
24	27	28	27	23	25	28	59	154	709	114	39	44
25	28	28	29	23	26	27	49	173	575	105	78	56
26	28	28	28	24	25	28	51	218	508	108	83	71
27	26	30	28	24	26	27	58	280	529	110	66	81
28	28	32	28	24	29	24	73	306	460	101	58	80
29	28	32	28	25	24	24	68	275	395	101	53	84
30	27	34	27	25	25	26	64	292	406	96	49	65
31	26	...	27	25	25	28	...	285	...	104	55	1593
Total	1111	972	851	783	744	812	1245	3936	20146	6585	1660	1531
Mean.	35.8	32.4	27.5	25.3	26.6	26.2	41.5	127	672	212	53.5	53.1
Max..	46	38	29	27	30	29	73	306	1200	400	91	84
Min...	26	26	24	23	24	24	28	44	246	96	28	27
Acre-ft.	2200	1930	1690	1550	1480	1610	2470	7810	39960	13060	3290	3160

Total run-off for water year 1934-35 = 80,210 acre-feet.

Discharge of Roaring Fork River at Aspen, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	38	23	21	22	25	19	220	827	193	115	79
2	53	36	21	21	22	23	22	223	579	171	123	55
3	46	38	20	21	21	23	19	339	445	169	117	51
4	44	41	21	21	20	23	20	505	388	154	95	49
5	42	36	22	21	21	22	20	599	347	158	90	50
6	35	33	22	22	22	23	19	589	312	150	124	48
7	36	29	21	20	22	22	20	397	410	145	98	44
8	36	27	20	20	22	22	20	293	569	140	92	42
9	36	28	20	21	22	23	24	245	631	134	80	38
10	37	29	19	20	22	24	25	217	641	132	82	40
11	39	23	22	20	22	20	28	232	620	146	83	48
12	39	26	25	21	22	21	36	335	589	150	76	46
13	39	28	21	21	22	22	50	482	605	126	70	44
14	40	26	20	22	22	22	71	599	569	108	66	42
15	42	25	19	22	22	20	89	750	505	108	60	38
16	42	25	19	22	22	18	122	838	520	106	57	36
17	39	25	20	22	21	20	143	772	486	96	54	32
18	42	25	22	22	20	20	160	750	477	89	54	31
19	38	25	22	21	21	19	166	761	450	92	58	33
20	34	22	22	23	22	19	206	832	401	110	68	42
21	36	22	23	23	23	21	214	827	367	90	68	41
22	29	25	22	22	24	21	251	766	363	83	66	39
23	29	23	21	22	24	21	282	750	351	64	62	38
24	36	23	21	22	21	17	262	712	335	57	54	37
25	32	22	21	22	23	19	282	838	300	52	50	34
26	32	22	21	22	25	19	272	914	380	52	46	32
27	35	23	21	22	25	18	289	860	297	65	42	36
28	37	25	21	22	25	19	275	794	245	62	42	43
29	34	23	21	22	24	19	279	816	247	65	40	42
30	35	26	21	22	22	19	232	896	226	79	45	46
31	39	21	21	21	20	20	844	...	110	51	...	...
Total	1191	819	655	666	646	644	3917	18995	13482	3456	2228	1276
Mean.	38.4	27.3	21.1	21.5	22.3	20.8	131	613	449	111	71.9	42.5
Max..	58	41	25	23	25	25	289	914	827	193	124	79
Min...	29	22	19	20	20	17	19	217	226	52	40	31
Acre-ft.	2360	1620	1300	1320	1280	1280	7770	37680	26740	6850	4420	2530

Total run-off for water year 1935-36 = 95,150 acre-feet.

**Correction Table for Roaring Fork at Aspen, Colorado, for Diversions by Twin Lakes Tunnel
For Water Year October 1, 1934 to September 30, 1935**

Month	Runoff in Acre-feet	Diversions by Twin Lakes Tunnel Acre-feet	Corrected for Diversion Acre-feet
October	2200	...	2200
November	1930	...	1930
December	1690	...	1690
January	1550	...	1550
February	1480	...	1480
March	1610	...	1610
April	2470	...	2470
May	7810	713	8520
June	39960	11140	51100
July	13060	4150	17210
August	3290	1160	4450
September	3160	861	4020
Total runoff for water year 1934-1935	80210	18,020	98230

Note Diversion for Twin Lakes Tunnel started May 24, 1935.

For Water Year October 1, 1935 to September 30, 1936

October	2360	511	2870
November	1620	163	1780
December	1300	149	1450
January	1320	290	1610
February	1280	153	1430
March	1280	125	1400
April	7770	1060	8830
May	37680	9310	46990
June	26740	7840	34580
July	6850	2810	9660
August	4420	1820	6240
September	2530	0	2530
Total runoff for water year 1935-1936	95150	24230	119400

**Discharge of Roaring Fork River at Glenwood Springs, Colorado, for Year
Ending Sept. 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	511	337	310	251	270	264	337	896	2820	4340	1510	820
2	504	379	351	251	264	257	351	820	2500	4340	1370	812
3	451	372	344	264	270	264	386	770	2630	4320	1260	728
4	473	365	283	296	270	257	379	745	3270	4100	1200	695
5	458	400	317	369	270	251	386	720	3840	3760	1170	646
6	458	400	324	336	290	209	372	795	4730	3490	1090	622
7	466	393	372	296	310	226	330	829	5450	3490	1030	712
8	429	393	365	290	296	257	344	854	6130	3410	1110	1040
9	407	386	386	317	283	233	393	948	6760	3510	1190	965
10	400	393	393	303	251	220	344	1040	8010	3580	1020	922
11	393	393	379	283	257	220	317	1180	8700	3530	956	854
12	386	386	358	317	270	239	310	1340	9120	3320	939	795
13	386	372	372	276	264	245	344	1460	9520	3030	896	770
14	379	365	372	283	257	296	407	1420	10300	2900	837	728
15	393	365	351	283	226	344	504	1290	10800	2760	778	687
16	414	365	358	290	251	303	630	1290	10400	2470	778	662
17	400	358	324	251	251	283	679	1420	7160	2320	804	622
18	386	358	330	209	264	296	606	1590	5980	2330	812	550
19	400	358	283	257	283	303	598	1520	6340	2190	753	527
20	429	344	344	276	270	296	712	1380	6860	2150	770	488
21	414	344	337	179	290	283	829	1280	8060	2070	630	488
22	407	351	324	214	264	296	879	1390	7440	1980	622	488
23	386	337	330	276	264	283	862	1580	7210	1880	695	496
24	372	358	317	330	283	296	829	2120	7140	1720	662	496
25	365	337	324	372	257	276	728	2590	6130	1620	812	582
26	379	344	270	379	194	310	662	2860	5290	1530	913	837
27	365	324	296	372	220	317	687	3340	5610	1480	862	1080
28	365	337	344	324	251	296	736	3340	5160	1410	778	939
29	365	344	317	303	...	303	770	3440	4520	1380	745	913
30	358	344	290	270	...	337	871	3360	4690	1420	695	871
31	351	...	303	270	...	365	...	3510	1540	720	...	...
Total	12650	10902	10368	8987	7390	8625	16582	51617	192570	83370	28407	21835
Mean.	408	363	334	290	264	278	553	1665	6419	2689	916	728
Max..	511	400	393	379	310	365	879	3340	10800	4340	1510	1080
Min..	351	324	270	179	194	209	310	720	2500	1380	622	488
Ac.-ft.	25090	21620	20560	17830	14660	17110	32890	102400	332000	165400	56340	43310

Total run-off for water year 1934-35 = 899,200 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Roaring Fork River at Glenwood Springs, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	810	528	388	402	408	336	342	2550	7560	2390	1250	846
2....	792	514	395	388	388	336	310	2420	5510	2080	1350	774
3....	757	536	395	429	362	349	336	3060	4180	2030	1480	731
4....	740	544	402	402	323	362	330	4340	3600	1930	1360	722
5....	714	485	402	449	342	362	336	5310	3290	1850	1150	697
6....	688	499	402	436	375	362	310	5960	2940	1790	1360	680
7....	663	514	402	375	408	375	330	4510	3140	1660	1250	672
8....	647	506	395	415	336	362	356	3530	4440	1610	1080	639
9....	639	506	395	415	356	368	375	2940	5240	1580	1020	614
10....	631	521	362	456	368	402	382	2660	5490	1510	1040	598
11....	622	506	408	408	395	356	449	2690	5600	1820	1040	731
12....	606	485	402	408	368	356	544	3320	5400	1940	1100	740
13....	598	506	436	375	356	375	748	4220	5800	1620	1020	722
14....	590	506	422	402	349	368	960	4850	5820	1450	970	697
15....	575	492	362	402	349	368	1180	5440	5310	1400	912	655
16....	575	470	349	395	342	342	1520	7080	5290	1400	846	622
17....	590	485	342	388	336	356	1810	7380	5090	1450	837	598
18....	590	492	368	336	330	368	2190	6480	4870	1490	846	631
19....	575	492	395	310	342	356	2160	6480	4830	1370	846	655
20....	575	463	442	415	336	342	2320	7200	4340	1370	1000	639
21....	590	456	463	463	336	362	2600	7260	4100	1250	1030	622
22....	583	449	470	395	336	375	2920	6700	4100	1150	941	614
23....	551	463	492	408	368	375	3250	6730	3860	1050	864	598
24....	567	449	514	415	356	349	3050	6440	3670	990	819	567
25....	559	463	499	422	317	362	3140	7180	3370	931	765	544
26....	559	456	492	395	330	342	3140	7630	3790	950	731	551
27....	559	442	492	362	330	336	3270	7630	3400	950	680	606
28....	551	449	492	382	330	336	3050	7280	3160	1010	663	598
29....	544	422	436	375	330	330	3170	6980	3110	1010	647	606
30....	544	408	395	323	....	342	2840	7740	2840	1180	647	631
31....	544	....	402	323	....	356	....	7500	....	1240	697	....
Total	19128	14537	13011	12269	10202	11066	47718	171990	133140	45451	30241	19600
Mean.	617	485	420	396	352	357	1591	5548	4438	1466	976	653
Max..	810	544	514	463	408	402	3270	7740	7560	2390	1480	846
Min..	544	408	342	310	317	330	310	2420	2840	931	647	544
Acre-ft.	37940	28830	25810	24340	20240	21950	94650	341100	264100	90150	59980	38880

Total run-off for water year 1935-36=1,048,000 acre-feet.

Discharge of Crystal River Near Redstone, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	770	1500	421	244
2....	720	1480	373	214
3....	830	1450	320	187
4....	1080	1360	314	166
5....	1250	1280	295	153
6....	1420	1200	283	146
7....	1580	1220	286	198
8....	1730	1230	324	259
9....	1900	1250	320	220
10....	2140	1230	280	198
11....	2250	1170	271	190
12....	533	1220	262	166
13....	560	2450	1060	235
14....	538	2510	1020	220
15....	497	2520	960	209
16....	502	2260	875	238
17....	533	1740	800	238
18....	596	1680	800	232
19....	546	1820	690	212
20....	497	1900	740	187
21....	502	2080	705	175
22....	569	2010	675	195
23....	665	2080	605	223
24....	810	1940	569	206
25....	950	1760	569	280
26....	1040	1670	551	244
27....	1160	1690	520	232
28....	1100	1570	484	209
29....	999	1400	474	195
30....	982	1570	461	187
31....	944	....	456	185
Total	14523	52610	28504	7897
Mean.	May 12	1754	919	255
Max..	to 31	2520	1500	421
Min..	720	456	175
Acre-ft.	28810	104400	56540
										15660	10160	10160

Total run-off for period=215,600 acre-feet.

Discharge of Crystal River Near Redstone, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	174	103	98	69	70	75	86	502	1910	708	278	176
2....	162	104	92	69	70	74	79	498	1610	650	315	160
3....	154	103	94	69	64	74	82	650	1280	670	393	160
4....	148	105	96	68	59	76	78	745	1150	644	315	154
5....	144	100	98	68	65	73	78	1490	1000	608	275	148
6....	132	97	98	69	69	73	74	1540	890	602	315	142
7....	127	98	95	66	70	76	75	1090	1140	558	281	138
8....	127	95	95	66	70	78	84	826	1610	558	255	128
9....	123	94	96	68	70	80	83	676	1820	526	247	125
10....	119	95	89	66	70	92	94	650	1890	498	236	119
11....	118	90	90	66	74	92	116	745	1950	702	269	187
12....	116	90	88	70	73	92	168	1030	1930	522	250	168
13....	112	94	86	70	70	92	239	1410	2040	397	269	194
14....	109	96	79	71	69	94	290	1520	2020	412	247	187
15....	106	96	63	73	69	94	344	1760	1990	432	234	164
16....	103	96	60	73	69	82	393	1860	1890	470	234	154
17....	103	100	69	70	65	82	412	1740	1840	470	228	138
18....	106	100	71	65	60	82	444	1740	1830	444	216	130
19....	109	101	79	62	64	80	457	1740	1740	428	269	127
20....	111	95	82	74	63	78	466	1890	1740	412	328	121
21....	114	96	83	75	62	82	498	1910	1730	382	278	116
22....	109	96	80	75	62	83	602	1880	1530	348	231	111
23....	106	98	75	71	70	86	626	1900	1530	321	221	108
24....	101	101	78	70	65	86	644	1980	1520	315	208	104
25....	101	106	75	73	57	83	638	2030	1350	299	192	103
26....	100	106	71	73	55	82	626	2030	1480	348	181	108
27....	101	106	70	69	58	82	656	2040	1260	305	172	121
28....	101	104	70	70	68	82	638	1780	1210	321	168	121
29....	101	101	69	70	69	83	644	1850	1150	296	158	116
30....	101	100	69	63	....	83	558	1950	940	361	150	114
31....	101	....	69	60	....	89	....	2080	....	302	170	....
Total	3639	2966	2527	2141	1919	2560	10275	45532	46970	14309	7583	4142
Mean.	117	98.9	81.5	69.1	66.2	82.6	342	1469	1566	462	245	138
Max..	174	106	98	75	74	94	656	2080	2040	708	393	194
Min..	100	90	60	60	55	73	74	498	890	296	150	103
Acre-ft.	7220	5880	5010	4250	3810	5080	20380	90310	93160	28380	15040	8220

Total run-off for water year 1935-36=286,700 acre-feet.

Discharge of Willow Creek Near Raven, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1....	67	3.7	.1	.1	
2....	76	3.6	.1	.1	
3....	83	3.7	.1	.1	
4....	90	3.4	.1	.1	
5....	87	3.2	.1	0	
6....	76	2.9	.1	0	
7....	71	3.1	0	.1	
8....	67	2.9	.1	1.3	
9....	62	2.2	.2	.8	
10....	57	2.0	.2	.6	
11....	46	1.8	.1	.6	
12....	42	1.6	.1	.4	
13....	38	1.5	.1	.3	
14....	34	1.1	0	.3	
15....	28	1.0	0	.2	
16....	22	.8	.2	.2	
17....	19	.7	.2	.1	
18....	17	.5	.1	0	
19....	15	.5	.1	0	
20....	50	15	.9	.1	0	
21....	52	13	1.1	.1	0	
22....	63	12	.8	.1	0	
23....	81	10	.2	.9	0	
24....	94	8.8	.2	.8	0	
25....	103	8.6	.1	.8	0	
26....	104	7.6	0	.6	.3	
27....	108	7.4	.1	.3	1.9	
28....	97	6.9	.1	.2	1.9	
29....	90	6.9	0	.1	1.2	
30....	87	5.1	.1	.1	.7	
31....	78	....	.2	.1	....
Total	1007	1098.3	44.0	6.2	11.3
Mean.	May 20	36.6	1.42	.20	.38
Max..	to 31	90	3.7	.9	1.9
Min..	5.1	0	0	0
Acre-ft.	2000	2180	87	12	22

Total run-off for the period=4,301 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Willow Creek Near Raven, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	.6	1.0	...	...	...	...	1	52	13	3.1	4	0
2	.7	1.2	...	...	...	...	1	63	15	1.9	1.0	0
3	.6	1.2	...	...	...	...	1	84	14	1.3	.5	0
4	.5	1.1	...	...	...	...	1	98	13	1.3	.4	0
5	.7	1.5	...	...	...	...	1	100	12	1.2	.3	0
6	.6	1.8	...	...	...	...	1	77	12	.8	.4	0
7	.5	1.2	...	...	...	...	1	58	11	.6	.4	0
8	.6	1.1	...	...	...	...	1	49	8.8	.6	.3	0
9	.4	1.2	...	...	...	...	1	46	8.6	.4	.2	0
10	.3	1.9	...	...	...	...	1	49	8.1	.5	.2	0
11	.3	1.0	...	...	...	...	6	56	6.9	2.3	.2	0
12	.5	...	...	...	...	...	11	60	6.4	2.6	.2	0
13	.4	...	...	...	...	...	15	58	6.2	1.6	.3	0
14	.3	...	...	...	...	...	18	54	5.1	1.1	.2	0
15	.3	...	...	...	...	...	26	52	4.4	.8	.2	0
16	.6	...	...	...	...	...	29	54	4.9	.5	0	0
17	.8	...	...	...	...	...	31	49	4.0	.8	0	0
18	.9	...	...	...	...	...	28	43	3.6	2.0	0	0
19	.9	...	...	...	...	...	24	41	2.9	.8	0	0
20	1.0	...	...	...	...	...	33	37	2.8	.3	0	0
21	.9	...	...	...	...	...	43	33	2.6	.2	0	0
22	.9	...	...	...	...	...	51	28	2.3	.2	0	0
23	.9	...	...	...	...	...	52	26	2.6	.1	0	0
24	.8	...	...	...	...	...	52	18	2.6	.1	0	0
25	1.0	...	...	...	...	...	58	21	2.3	.2	0	0
26	1.5	...	...	...	...	...	61	20	2.2	.1	0	0
27	1.6	...	...	...	...	...	60	19	2.2	.1	0	0
28	1.2	...	...	...	...	...	62	17	2.2	.2	0	0
29	1.0	...	...	...	...	...	64	15	2.3	.2	0	0
30	1.0	...	...	...	...	...	56	14	2.8	.1	0	0
31	1.0	...	...	...	...	...	14	...	...	...	0	0
Total	23.3	14.2	...	...	...	...	790	1405	186.8	26.1	5.3	0
Mean.	0.75	1.29	...	...	...	...	26.3	45.3	6.23	.84	.17	0
Max.	1.6	Nov. 1	...	...	...	...	64	100	15	3.1	1.0	0
Min.	0.3	to 11	...	...	...	...	1	14	2.2	.1	0	0
Acre-ft.	46	28	...	...	...	...	1570	2790	371	52	11	0

Total run-off for the period=4,868 acre-feet.

Discharge of Roan Creek Near Highmore, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	59	5.6	1.4	0.6
2	52	5.3	1.4	0.6	0.6
3	47	5.5	1.4	0.6	0.6
4	44	4.7	1.2	0.6	0.6
5	43	4.2	1.2	0.6	0.6
6	42	2.8	1.0	0.6	0.6
7	41	2.6	1.0	0.6	0.6
8	41	2.6	0.8	0.6	0.6
9	45	2.2	0.8	0.6	0.6
10	48	2.2	0.7	0.6	0.6
11	48	2.0	0.7	0.5	0.5
12	37	1.8	0.6	0.5	0.5
13	28	2.0	0.6	0.5	0.5
14	25	1.5	0.5	0.5	0.5
15	25	2.3	0.5	0.5	0.5
16	76	24	2.3	20.0	0.5	0.5
17	88	20	2.2	8.0	0.5	0.5
18	98	15	2.6	3.2	0.5	0.5
19	100	13	2.5	2.2	0.5	0.5
20	84	12	2.2	1.8	0.5	0.5
21	72	12	2.3	1.2	0.5	0.5
22	68	11	2.3	0.8	0.5	0.5
23	76	12	1.8	0.6	0.5	0.5
24	98	12	1.9	0.7	0.5	0.5
25	112	12	1.8	0.6	0.5	0.5
26	112	12	1.8	0.6	0.4	0.4
27	98	10	1.8	0.6	0.4	0.4
28	88	8.9	1.7	0.6	0.4	0.4
29	82	8.0	1.7	0.6	0.5	0.5
30	82	6.5	1.7	0.6	0.5	0.5
31	76	...	1.6	0.6	0.5	0.5
Total	1410	813.4	79.5	56.5	15.7	0
Mean.	May 16	27.1	2.56	1.82	0.52	0
Max.	to 31	59	5.6	20	0.6	0
Min.	6.5	1.6	0.5	0.4	0
Acre-ft.	2800	1610	158	112	31	0

Total run-off for the period=4,710 acre-feet.

Discharge of Roan Creek Near Highmore, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1		*0.5					2.7	18	6.7	8.1	0.8	0.1	
2							2.5	18	4.6	6.7	.6	.2	
3							2.7	17	3.6	5.1	.5	.1	
4							2.9	16	3.6	5.1	.4	.1	
5							2.9	15	4.3	3.4	.5	.1	
6							2.0	16	4.3	2.3	.5	.1	
7							2.3	16	3.8	2.5	.4	0	
8							2.9	16	3.1	2.3	.6	0	
9						7.6	3.1	16	3.1	1.8	.4	.1	
10						12	4.1	15	2.9	2.9	.2	0	
11						7.6	5.9	14	4.1	5.6	.2	0	
12						7.3	5.4	14	4.1	4.1	.2	0	
13						5.1	5.4	11	4.1	2.5	.2	0	
14						3.1	4.8	9.3	3.1	1.4	.1	0	
15						1.5	5.4	9.0	2.5	1.0	.1	0	
16						1.5	5.6	9.0	2.0	.7	.1	0	
17						1.4	5.4	8.4	2.9	.6	0	0	
18						1.5	7.0	7.8	2.3	.6	.1	0	
19						1.8	7.8	7.8	1.8	.4	.1	0	
20						2.0	9.0	7.6	2.0	.4	.1	0	
21						2.3	11	7.3	1.6	.5	.1	0	
22						2.3	13	7.0	1.6	.5	.1	0	
23						2.5	16	7.0	2.0	.4	.1	0	
24						2.7	17	7.0	2.0	.3	0	0	
25						3.1	18	7.3	1.6	.6	.1	0	
26						2.7	18	8.1	11	.4	.1	0	
27						2.5	18	10	8.4	.3	0	0	
28						2.5	18	5.9	3.4	.4	0	0	
29						1.8	18	5.6	5.1	1.1	0	0	
30						1.6	18	4.8	7.6	.9	.1	0	
31						2.0	..	6.1	..	.8	.1	..	
Total						78.4	254.8	337.0	113.2	63.7	6.8	.8	
Mean..						Mar. 9	8.49	10.9	3.77	2.05	.22	.03	
Max..						to 31	18	18	11	8.1	0.8	0.2	
Min..						..	2.0	4.8	1.6	.3	0	0	
Acre-ft.							156	505	668	225	126	13	1.6

Total run-off for the period=1,690 acre-feet.

Discharge of Carr Creek Near Highmore, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1									82	10	3.4	2.7	
2									73	10	3.4	2.4	
3									63	10	3.4	2.6	
4									58	10	3.4	2.0	
5									52	9.4	3.2	2.6	
6									48	9.4	3.2	3.1	
7									45	9.4	3.4	2.4	
8									40	8.4	2.7	2.4	
9									38	7.9	2.6	2.4	
10									33	7.9	2.6	2.4	
11									30	7.4	2.4	1.7	
12									26	6.2	1.9	1.9	
13									23	6.2	2.0	1.9	
14									20	5.5	2.0	1.9	
15									61	19	5.5	2.6	
16									65	19	3.4	1.6	
17									80	18	3.4	1.5	
18									112	17	3.4	1.6	
19									113	16	3.4	4.1	
20									101	15	3.8	3.5	
21									83	12	3.4	1.5	
22									69	12	3.2	3.4	
23									76	11	3.2	3.4	
24									94	11	3.2	3.8	
25									116	11	3.2	3.4	
26									122	11	3.2	3.2	
27									113	10	3.4	3.4	
28									96	10	3.2	3.8	
29									90	10	3.1	3.2	
30									89	10	3.2	3.2	
31									88	..	3.2	3.1	
Total									1568	843	176.1	139.2	55.5
Mean..									May 15	28.1	5.68	4.49	1.85
Max..									to 31	82	10	36	3.1
Min..									..	10	3.1	1.9	1.1
Acre-ft.									3110	1670	349	276	110

Total run-off for period=5,520 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of Carr Creek Near Highmore, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	1.7	0.3	0.1	0.2	.....	0.1	0.8	38	3.8	1.0	0.7	0.5
2....	1.7	0.2	.1	.2	.....	.1	.8	32	5.2	.9	.6	.5
3....	1.5	.2	.1	.2	.....	.6	.8	22	4.1	.9	.6	.4
4....	1.5	.1	.1	.2	.....	.6	.8	18	2.4	1.2	.6	.4
5....	1.6	.1	.2	.2	.....	.6	.8	18	3.1	1.0	.8	.5
6....	1.7	.2	.2	.1	.....	.6	.6	19	7.4	.8	.6	.4
7....	1.6	.6	.2	.1	.....	.7	.6	18	8.9	.8	.4	.4
8....	2.0	.6	.2	.2	.....	.6	.8	14	7.9	.8	.4	.4
9....	2.2	.8	.1	.2	.....	.6	.8	13	7.4	.7	.5	.4
10....	2.0	.9	.2	.2	.....	.7	.8	11	5.5	.8	.6	.4
11....	2.2	1.0	.2	.2	.....	.8	.8	10	3.8	1.5	.7	.4
12....	2.4	1.2	.2	.2	.....	.8	.8	10	2.7	1.2	.9	.4
13....	2.4	1.1	.2	.2	.....	.8	.6	9.4	1.9	1.1	.8	.4
14....	2.4	1.5	.2	.2	.....	.9	.6	8.9	2.2	1.0	.8	.4
15....	2.6	2.9	.2	.2	.....	.8	.6	8.9	1.7	1.0	.7	.4
16....	3.4	2.4	.1	.2	.....	.8	.6	8.4	1.5	.8	.8	.5
17....	2.6	2.4	.2	.1	.....	.8	.7	6.9	1.7	.6	.8	.6
18....	2.2	2.4	.2	.1	.....	.7	.8	11	1.5	.6	.8	.5
19....	3.4	2.6	.2	.1	.....	.6	.7	12	1.5	.6	.8	.5
20....	3.4	2.6	.2	.1	.....	.6	.6	13	1.4	.7	.8	.4
21....	4.1	2.7	.2	.2	.....	.6	1.1	13	1.4	.4	.8	.4
22....	3.1	2.7	.2	.2	.....	.6	8.4	14	1.5	.4	.7	.5
23....	3.4	2.4	.2	.1	.....	.6	27	13	1.5	.3	.4	.6
24....	1.5	1.6	.2	.1	.....	.6	45	12	1.5	.3	.4	.6
25....	.9	.2	.2	.1	.....	.8	51	13	1.4	.4	.3	.6
26....	.9	.2	.2	.2	.....	.8	50	14	1.5	.6	.1	.6
27....	.8	.1	.2	.2	.....	.8	41	10	1.2	.6	0	.6
28....	.7	.1	.2	.2	.....	.8	41	3.4	1.1	.6	0	.6
29....	.6	.1	.2	.2	.....	.6	41	3.8	1.0	.8	0	.7
30....	.7	.2	.1	.2	.....	.6	40	5.5	1.0	.7	.1	.8
31....	.5	.....	.1	.1	.....	.6	.....	5.2	.....	.6	.....	.....
Total	61.7	34.4	5.4	5.2	5.0	19.7	359.9	408.4	88.7	23.7	16.9	14.8
Mean	1.99	1.15	.17	.17	.17	.64	12.0	13.2	2.96	.76	.55	.49
Max....	4.1	2.9	.2	.2	.....	.9	51	38	8.9	1.5	.9	.8
Min....	.5	.1	.1	.1	.....	.1	.6	3.4	1.0	.3	0	.4
Acre-ft.	122	68	11	10	9.9	39	714	810	176	47	34	29

Total run-off for water year 1935-1936=2,070 acre-feet.

Discharge of Plateau Creek Near Colbran, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	11	8.2	.....	.....	.....	12	15	48	486	224	33	16
2....	10	8.6	.....	.....	.....	12	17	46	541	199	20	13
3....	10	8.8	.....	.....	.....	12	18	39	577	174	21	13
4....	9.6	10	.....	.....	.....	12	17	40	614	142	23	12
5....	9.0	9.6	.....	.....	.....	12	15	38	660	112	21	11
6....	8.6	9.6	.....	.....	.....	10	16	43	756	93	20	11
7....	7.8	9.6	.....	.....	.....	10	14	51	778	90	19	30
8....	7.8	9.4	.....	.....	.....	10	13	65	788	83	47	38
9....	7.8	9.4	.....	.....	.....	10	19	96	783	68	62	25
10....	7.8	9.6	.....	.....	.....	10	17	119	767	60	29	16
11....	7.8	8.4	.....	.....	.....	11	17	142	745	49	23	14
12....	8.0	9.0	.....	.....	.....	11	18	161	692	52	20	13
13....	8.4	8.6	.....	.....	.....	11	21	172	582	64	18	12
14....	8.0	8.6	.....	.....	.....	11	52	181	384	42	17	12
15....	8.0	8.8	.....	.....	.....	11	65	134	432	34	15	11
16....	7.6	8.2	.....	.....	.....	10	48	147	506	30	17	11
17....	9.0	9.4	.....	.....	.....	10	46	158	541	29	24	11
18....	8.0	9.4	.....	.....	.....	10	35	175	526	30	24	11
19....	8.4	9.0	.....	*12	10	40	156	451	32	16	11	11
20....	8.4	9.6	.....	.....	.....	10	57	134	481	35	14	11
21....	7.8	10	.....	.....	.....	12	64	132	456	37	14	11
22....	8.2	9.6	.....	.....	.....	12	69	150	422	33	16	11
23....	8.6	9.6	.....	.....	.....	12	57	232	412	26	15	11
24....	8.2	10	.....	.....	.....	12	47	284	384	25	17	12
25....	8.4	10	.....	.....	.....	12	44	302	347	20	19	26
26....	8.6	10	.....	.....	.....	13	40	403	329	19	23	55
27....	7.8	10	.....	.....	.....	13	43	446	293	21	17	38
28....	7.6	10	.....	.....	.....	13	46	446	297	30	21	35
29....	7.8	10	.....	.....	.....	13	48	471	275	33	17	30
30....	7.4	10	.....	.....	.....	15	56	471	258	43	16	19
31....	7.8	.....	.....	.....	.....	16	.....	506	74	18	.....	.....
Total	259.2	281.0	372	341	280	358	1074	5988	15563	2003	676	550
Mean	8.36	9.37	12	11	10	11.5	35.8	193	519	64.6	21.8	18.3
Max....	11	10	.....	.....	.....	16	69	506	788	224	62	55
Min....	7.4	8.2	.....	.....	.....	10	13	38	258	19	14	11
Acre-ft.	514	557	738	676	555	710	2130	11880	30870	3970	1340	1090

Total run-off for water year 1934-35=55,030 acre-feet.

*Discharge measurement.

Discharge of Plateau Creek Near Collbran, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	17				14	15	206	209	28	15	17
2	13	15				13	20	220	181	24	17	11
3	14	15				13	16	398	211	21	21	18
4	16	15				13	15	644	211	19	21	18
5	15	14				13	15	806	166	19	19	10
6	13	14				14	15	644	137	17	70	9.2
7	12	15				15	16	324	130	16	49	8.2
8	11	17				15	17	220	151	19	30	8.2
9	11	17				16	17	186	158	20	30	7.5
10	10	16				14	18	209	151	19	22	8.9
11	10	15				14	23	303	144	37	20	29
12	10	17				13	30	471	139	35	20	16
13	10	16				15	47	543	134	18	21	26
14	10	16				17	69	611	123	16	15	19
15	11	15				14	98	688	123	14	13	13
16	11	15				14	139	710	128	26	9.2	11
17	12	15				14	166	866	94	30	8.6	10
18	10	14				14	186	746	78	24	21	10
19	10	14	*13			14	179	734	69	22	14	11
20	12	13				15	171	722	60	21	23	9.2
21	12	13			*11	15	203	543	52	22	24	8.9
22	11	14				15	237	471	47	19	16	8.6
23	13	15				15	271	412	52	17	11	8.2
24	15	15				16	224	368	48	16	8.6	7.2
25	15	13				15	230	288	39	17	11	6.5
26	16	13				15	267	254	35	20	9.6	7.8
27	15	15				15	308	267	29	24	8.9	11
28	14	15				14	308	230	30	19	8.6	11
29	15	14				14	329	206	52	29	8.2	9.6
30	14	13				14	254	206	33	41	9.2	9.2
31	15					14		234		21	12	
Total	391	445	403	434	348	446	3903	13730	3214	690	585.9	358.2
Mean.	12.6	14.8	13	14	12	14.4	130	443	107	22.3	18.9	11.9
Max..	16	17				17	329	866	211	41	70	29
Min..	10	13				13	15	186	29	14	8.2	6.5
Acre-ft.	776	883	799	861	690	885	7740	27230	6370	1370	1160	710

Total run-off for water year 1935-1936=49,470 acre-feet.

Discharge of Plateau Creek Near Cameo, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								513	358	46	29	44
2								490	285	46	32	39
3								707	266	40	29	39
4								1070	332	36	27	36
5								1340	270	29	39	34
6								1300	226	25	59	34
7								707	189	25	75	33
8								530	189	20	59	32
9								413	210	20	59	32
10								437	200	20	43	32
11								525	181	26	36	39
12								701	171	62	31	34
13								784	166	41	47	34
14								816	152	34	34	36
15								897	145	25	31	32
16								1080	161	28	31	32
17								1070	129	27	26	28
18								1000	105	59	31	28
19								830	90	32	26	28
20								870	77	29	26	28
21								836	66	26	34	28
22								608	62	23	39	28
23								536	59	21	28	27
24								479	59	19	27	27
25								427	50	21	26	27
26								714	375	49	20	26
27								676	349	47	20	26
28								683	300	39	20	26
29								471	285	43	23	41
30								664	277	61	36	39
31								308	37	61		
Total								3508	20860	4437	936	1122
Mean.								Apr. 26	673	148	30.2	36.2
Max..								to 30	1340	358	62	33.4
Min..									277	39	19	44
Acre-ft.									6960	41380	8800	1860
											2230	1990

Total run-off for the period=63,220 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Buzzard Creek Near Heiberger, Colorado for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	185	82	7.0	0.8	0
2	180	70	4.6	.7	0
3	250	71	2.8	5.6	0
4	300	70	2.6	5.9	0
5	340	55	2.6	3.5	0
6	320	45	1.8	1.8	0
7	210	38	1.8	1.4	0
8	175	34	1.2	5.6	0
9	155	36	1.3	2.7	0
10	175	30	1.2	1.9	0
11	190	29	3.8	1.9	0
12	200	26	11	3.3	0
13	196	25	7.3	3.5	0
14	191	23	4.2	2.4	0
15	205	22	2.6	1.2	0
16	250	20	1.7	.8	0
17	235	16	1.5	.8	0
18	205	13	1.3	.5	0
19	199	11	.5	.7	0
20	199	7.6	0	1.4	0
21	171	6.2	0	2.2	0
22	145	5.3	.1	3.5	0
23	125	4.6	0	1.4	0
24	114	4.9	0	.7	0
25	111	5.6	0	.3	0
26	106	5.3	0	.1	0
27	101	3.8	0	0	0
28	78	4.0	0	0	0
29	65	10	0	0	0
30	58	12	0	0	0
31	95	...	.2	0	...
Total	5529	785.3	61.1	83.4	0
Mean	178	26.2	1.97	2.69	0
Max	340	82	11	18	0
Min	58	3.8	0	0	0
Acre-ft.	10970	1560	121	165	0

Total run-off for period=12,820 acre-feet.

Discharge of Buzzard Creek Near Colbran, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.4	0.4	...	...	...	3	16	79	251	26	0.8	0.7
2	0.3	0.4	...	...	...	3	23	74	256	20	0.7	0.4
3	0.4	0.5	...	...	...	3	24	76	284	18	0.8	0.4
4	0.4	0.5	...	...	...	3	17	95	301	16	0.8	0.4
5	0.4	0.5	...	...	...	3	15	72	315	14	0.7	0.4
6	0.4	0.5	...	...	...	2	13	78	305	11	0.6	0.4
7	0.3	0.5	...	...	...	2	12	87	313	8.7	0.5	0.6
8	0.3	0.4	...	...	...	2	14	108	296	7.4	0.6	0.7
9	0.3	0.4	...	...	...	2	13	140	272	7.4	0.7	7.4
10	0.3	0.5	...	...	...	2	13	166	269	7.7	0.7	4.3
11	0.4	0.5	...	...	...	6	13	185	279	6.7	0.6	3.3
12	0.3	0.6	...	...	...	6	24	196	271	3.3	0.4	1.6
13	0.4	0.7	...	...	...	6	31	226	229	2.9	0.4	1.1
14	0.4	0.4	...	...	...	6	51	200	256	2.9	0.4	0.8
15	0.4	0.4	...	...	...	6	82	160	248	2.5	0.4	0.6
16	0.4	0.4	...	...	...	8	102	158	224	2.2	0.6	0.6
17	0.3	0.6	...	...	...	8	74	174	170	2.2	1.3	0.5
18	0.3	0.6	...	...	...	8	49	221	133	2.0	0.8	0.4
19	0.4	0.6	...	...	*1.7	8	49	229	112	2.5	0.5	0.3
20	0.4	0.6	...	...	...	8	61	192	92	2.7	0.4	0.3
21	0.4	0.7	...	...	...	10	70	168	91	4.1	0.4	0.3
22	0.4	0.7	...	...	...	10	87	180	73	2.7	0.4	0.2
23	0.4	0.6	...	...	...	10	76	216	65	2.3	0.3	0.2
24	0.4	0.8	...	...	...	10	64	293	54	2.2	0.5	0.3
25	0.4	0.7	...	...	...	10	62	366	44	1.1	0.6	0.4
26	0.3	0.6	...	...	...	12	65	379	36	0.8	0.4	0.8
27	0.4	0.5	...	...	...	14	101	352	30	0.8	0.6	16
28	0.4	0.5	...	...	...	16	87	361	30	0.7	1.8	14
29	0.4	0.5	...	...	...	15	74	330	28	0.7	0.8	9.0
30	0.4	0.5	...	...	...	19	90	315	25	0.7	0.8	7.2
31	0.3	...	...	...	...	18	...	315	...	1.8	0.8	...
Total	11.4	16.1	31.0	46.5	42.0	239	1472	6191	5352	184.0	20.1	75.6
Mean	0.37	0.54	1.0	1.5	1.5	7.7	49.1	200	178	5.94	0.65	2.52
Max	0.4	0.8	...	...	...	19	102	379	315	26	1.8	16
Min	0.3	0.4	...	...	...	2	12	72	25	0.7	0.3	0.2
Acre-ft.	23	32	61	92	83	474	2920	12280	10620	365	40	150

Total run-off for water year 1934-35=27,140 acre-feet.

*Discharge measurement.

Discharge of Buzzard Creek Near Colbran, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	4.9	3.5	.....	.....	.....	5	7.2	196	85	12	0.7	0.8
2....	3.5	3.5	.....	.....	.....	6	7.2	191	72	7.0	.7	.7
3....	2.5	3.9	.....	.....	.....	8	6.3	271	74	5.4	4.5	.8
4....	1.5	4.1	.....	.....	.....	10	6.5	327	73	5.4	9.2	.8
5....	1.3	4.0	.....	.....	.....	11	4.9	372	57	4.1	5.4	.7
6....	.8	4.0	.....	.....	.....	11	3.5	352	48	4.1	4.5	.6
7....	.8	4.0	.....	.....	.....	9.5	5.4	229	41	4.1	15	.6
8....	1.1	4.0	.....	.....	.....	9.2	14	197	34	4.5	8.0	.6
9....	1.8	4.0	.....	.....	.....	9.2	20	176	35	4.7	4.1	.6
10....	2.2	4.0	.....	.....	.....	9.5	25	197	34	4.5	2.9	.8
11....	2.3	4.0	.....	.....	.....	9.5	47	202	31	6.0	2.7	1.3
12....	2.5	4.0	.....	.....	.....	11	76	222	28	10	1.8	1.6
13....	2.5	4.0	.....	.....	.....	11	10.4	218	27	11	1.5	1.6
14....	2.5	4.0	.....	.....	.....	10	130	210	25	6.7	1.8	1.5
15....	2.5	4.0	.....	.....	.....	12	182	219	25	4.9	1.6	1.8
16....	2.7	4.0	.....	.....	.....	12	213	251	23	3.5	1.5	.7
17....	2.5	4.0	.....	.....	.....	13	230	235	19	3.5	1.3	.6
18....	2.5	4.0	.....	*4.2	.....	14	206	211	16	2.9	1.0	.6
19....	2.3	4.0	.....	.....	.....	16	168	196	14	2.3	1.3	.6
20....	2.5	4.0	.....	.....	.....	15	190	203	14	1.6	1.5	.6
21....	2.2	4.0	.....	.....	*3.2	16	216	179	12	1.6	1.5	.6
22....	2.0	4.0	.....	.....	.....	17	267	154	10	.8	1.1	.6
23....	2.0	4.0	.....	.....	.....	13	313	137	9.0	.7	1.0	.6
24....	2.2	4.0	.....	.....	.....	14	262	126	7.4	.7	.6	.6
25....	2.5	4.0	.....	.....	.....	11	254	118	6.7	.6	.6	.6
26....	2.9	4.0	.....	.....	.....	6.7	274	104	8.4	.7	.6	1.0
27....	3.1	4.0	.....	.....	.....	5.6	271	90	7.7	.7	.6	2.2
28....	3.3	4.0	.....	.....	.....	5.6	254	78	7.7	.7	.6	2.5
29....	3.5	4.0	.....	.....	.....	7.2	269	66	9.0	1.0	.7	2.5
30....	3.9	4.0	.....	.....	.....	9.5	229	61	13	.8	.7	2.0
31....	3.7	.....	.....	.....	.....	7.7	.....	98	7	.8	..	..
Total	76.5	119.0	114.7	124	101.5	325.2	4255.6	5886	865.9	1174.7	79.8	31.1
Mean.	2.47	3.97	3.7	4.0	3.5	10.5	142	190	28.9	3.79	2.57	1.04
Max.	4.9	.....	.....	.....	.....	17	313	372	85	12	15	2.5
Min.	.8	.....	.....	.....	.....	5	3.5	61	6.7	.6	.6	.6
Acre-ft.	152	236	228	246	201	645	8440	11670	1720	233	158	62

Total run-off for water year 1935-36=23,990 acre-feet.

Discharge of Taylor River at Almont, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	135	120	171	.....	.....	100	102	276	630	854	400	330
2....	135	127	160	.....	.....	100	111	178	652	816	345	276
3....	133	106	159	.....	.....	100	116	164	700	804	320	239
4....	135	133	159	.....	.....	100	116	445	804	768	340	216
5....	142	127	159	.....	.....	100	115	155	903	706	350	212
6....	140	124	159	.....	.....	105	118	199	1030	684	305	199
7....	138	129	159	.....	.....	105	109	335	1180	695	300	244
8....	135	129	159	.....	.....	105	116	296	1320	679	305	380
9....	135	129	159	.....	.....	105	127	345	1430	646	310	296
10....	133	135	159	.....	.....	105	111	400	1600	636	300	248
11....	133	131	159	.....	.....	110	106	440	1760	630	281	216
12....	133	131	159	.....	.....	110	113	460	1860	598	325	195
13....	138	129	159	.....	.....	110	122	430	1950	583	291	178
14....	138	127	159	.....	.....	110	142	420	2080	557	262	168
15....	138	127	159	.....	.....	110	191	370	2060	557	244	161
16....	138	129	159	.....	.....	107	221	400	2070	495	244	161
17....	142	129	159	.....	.....	107	225	395	1570	470	253	155
18....	140	142	159	.....	.....	107	161	390	1450	505	257	142
19....	135	138	159	.....	.....	107	140	360	1530	500	225	138
20....	133	118	159	.....	.....	107	208	340	1600	480	208	135
21....	131	127	159	.....	.....	105	272	345	1650	510	203	138
22....	129	129	159	.....	.....	105	375	390	1500	552	216	148
23....	129	133	159	.....	.....	105	345	445	1390	485	221	152
24....	127	138	159	.....	.....	105	267	541	1410	450	216	135
25....	129	116	159	.....	.....	102	208	614	1220	415	262	145
26....	124	127	159	.....	.....	100	191	668	1120	375	262	191
27....	122	116	159	.....	.....	100	203	722	1110	355	262	239
28....	120	116	159	.....	.....	100	234	739	1020	350	248	203
29....	118	127	159	.....	.....	100	272	657	925	400	248	208
30....	118	118	159	.....	.....	99	320	706	896	420	225	182
31....	116	.....	.....	.....	.....	100	.....	695	500	262	..	..
Total	4092	3807	3720	3545	3080	3231	5457	13020	40420	17475	8490	6030
Mean.	132	127	120	115	110	104	182	420	1347	564	274	201
Max.	142	142	142	142	142	110	375	739	2080	854	400	380
Min.	116	106	106	106	106	99	102	145	630	350	203	135
Acre-ft.	8120	7550	7380	7070	6110	6410	10820	25820	80170	34660	16840	11960

Total run-off for water year 1934-35=222,900 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Taylor River at Almont, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	169	148	91	78	97	90	104	795	1750	569	459	304
2....	163	182	89	100	102	92	104	879	1470	531	425	269
3....	160	163	93	87	102	96	111	1150	1210	494	448	265
4....	148	169	107	104	96	98	111	1420	1060	488	488	261
5....	145	124	114	107	88	100	111	1610	981	477	537	240
6....	142	163	114	78	88	102	104	1590	918	453	825	229
7....	151	163	114	98	94	104	107	1220	950	431	576	221
8....	163	148	107	109	84	107	116	989	1170	431	494	199
9....	160	145	100	114	78	109	116	840	1270	414	482	186
10....	160	157	93	102	85	104	114	802	1300	420	448	182
11....	160	132	100	93	93	104	129	910	1300	465	465	257
12....	163	132	114	85	92	100	157	1160	1220	525	404	214
13....	160	142	119	105	91	104	203	1400	1220	448	382	192
14....	160	151	121	110	90	107	261	1480	1210	387	357	186
15....	163	137	100	102	90	104	357	1650	1120	393	327	172
16....	160	126	104	93	88	98	488	1830	1130	404	309	166
17....	169	134	90	91	87	98	622	1760	1050	404	295	163
18....	163	151	82	92	85	104	765	1750	989	404	304	163
19....	175	134	80	97	85	104	825	1730	958	382	323	166
20....	199	124	82	115	84	107	887	1790	902	393	347	169
21....	199	121	84	113	84	111	1120	1810	879	372	367	166
22....	192	116	85	112	82	111	1170	1700	825	367	323	172
23....	192	126	86	112	87	109	1230	1680	848	332	278	169
24....	199	119	88	104	84	104	1090	1590	825	309	261	163
25....	199	124	85	98	82	107	1120	1810	772	286	248	163
26....	196	129	84	100	82	102	1140	1940	780	291	240	163
27....	203	114	85	104	84	102	1100	1860	887	291	236	169
28....	196	114	85	106	86	109	997	1670	743	332	248	189
29....	179	95	98	105	88	107	926	1620	707	414	269	189
30....	172	91	82	102	....	104	788	1800	643	459	291	192
31....	166	....	76	96	....	111	....	1790	....	525	291	....
Total	5326	4074	2952	3112	2558	3209	16473	46025	31087	12891	11747	5939
Mean.	172	136	95.2	100	88.2	104	549	1485	1036	416	379	198
Max.	203	182	121	115	102	111	1230	1940	1750	569	825	304
Min.	142	91	76	78	78	90	104	795	643	286	236	163
Acre-ft.	10560	8080	5860	6170	5070	6360	32670	91290	61660	25570	23300	11780

Total run-off for water year 1935-36=288,400 acre-feet.

Discharge of East River at Almont, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	61	62	....	....	....	....	70	334	1110	1040	304	243
2....	56	65	....	....	....	....	74	262	1050	984	284	217
3....	60	65	....	....	....	....	78	258	1180	984	276	196
4....	62	78	....	....	....	....	86	236	1410	922	276	185
5....	64	95	....	....	....	....	88	247	1650	855	284	179
6....	65	90	....	....	....	....	80	284	1840	756	280	169
7....	64	87	....	....	....	....	74	312	2010	798	276	210
8....	63	86	....	....	....	....	81	368	2140	777	284	292
9....	63	82	....	....	....	....	75	442	2260	784	284	236
10....	64	82	....	....	....	....	73	559	2310	826	273	210
11....	65	80	....	....	....	....	72	661	2380	819	284	196
12....	65	81	....	....	....	....	73	715	2460	763	280	190
13....	65	78	....	....	....	....	78	694	2460	749	250	182
14....	65	77	....	....	....	....	93	681	2570	708	226	169
15....	65	78	....	....	....	....	124	629	2560	674	217	161
16....	65	77	....	....	....	....	142	708	2530	610	223	156
17....	63	73	....	....	....	....	146	715	1990	578	230	146
18....	62	73	....	....	....	....	69	137	674	572	226	132
19....	62	72	....	....	....	....	64	154	655	1570	207	132
20....	61	69	....	....	....	....	58	199	681	1700	527	193
21....	57	70	....	....	....	....	63	280	623	1820	515	188
22....	54	72	....	....	....	....	60	344	812	1700	472	199
23....	53	75	....	....	....	....	58	316	1010	1640	448	190
24....	53	74	....	....	....	....	54	243	1240	1690	407	202
25....	52	72	....	....	....	....	50	220	1360	1450	385	115
26....	51	72	....	....	....	....	44	204	1470	1300	354	164
27....	51	70	....	....	....	....	48	196	1690	1300	312	202
28....	52	74	....	....	....	....	52	247	1720	1230	304	177
29....	52	73	....	....	....	....	51	316	1470	1070	296	230
30....	50	78	....	....	....	....	56	396	1420	1080	280	220
31....	53	....	....	....	....	....	65	1410	....	312	236	....
Total	1838	2280	....	....	....	....	792	4759	24340	52960	19351	7685
Mean.	59.2	76	....	....	....	....	159	785	1765	624	248	170
Max.	65	95	....	....	....	to 31	396	1720	2570	1040	304	292
Min.	50	62	....	....	....	....	70	236	1050	280	188	92
Acre-ft.	3650	4520	....	....	....	....	1570	9440	48280	105000	38380	15240
												10100

Total run-off for period=236,180 acre-feet.

TWENTY-EIGHTH BIENNIAL REPORT

Discharge of East River at Almont, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	155	103	69	55	45	63	55	1310	1820	583	306	168
2	148	113	73	55	46	63	55	1480	1530	516	322	148
3	143	103	74	56	45	63	57	1900	1210	494	339	148
4	133	106	74	56	40	62	57	2240	1010	467	310	148
5	129	97	74	55	39	59	58	2360	908	437	330	138
6	127	106	72	53	38	59	56	2440	840	413	386	138
7	123	101	70	50	36	58	57	1900	930	399	351	133
8	117	97	66	50	38	59	59	1470	1170	390	310	125
9	113	100	72	54	39	59	62	1270	1360	382	298	121
10	111	105	73	55	42	59	64	1250	1410	347	278	119
11	109	94	76	54	45	59	69	1470	1450	408	271	171
12	108	95	80	46	48	59	82	1830	1400	413	264	143
13	106	94	74	48	51	58	97	2120	1400	368	253	136
14	103	94	79	49	55	59	125	2140	1370	335	243	127
15	100	89	80	49	56	59	260	2400	1330	322	222	117
16	100	90	72	48	63	57	399	2420	1320	330	206	111
17	100	94	64	46	59	59	596	2320	1210	310	194	108
18	97	101	59	45	60	58	825	2270	1160	302	185	105
19	101	94	57	40	60	57	946	2250	1150	314	194	101
20	103	82	59	39	63	59	978	2250	1070	306	209	103
21	103	83	64	39	60	60	1330	2190	978	318	215	94
22	111	83	66	40	60	60	1460	2080	1030	314	185	83
23	115	84	67	40	59	60	1660	2050	970	275	166	80
24	121	79	67	41	58	62	1500	1950	922	253	155	77
25	117	82	67	45	57	60	1530	2020	832	239	148	77
26	115	80	69	42	58	59	1580	2120	1000	229	138	83
27	115	70	73	40	62	58	1650	2050	870	219	138	97
28	109	69	76	43	63	57	1550	1970	773	219	136	106
29	108	66	77	40	62	57	1540	1930	758	246	133	105
30	111	72	70	40	57	57	1340	1980	699	232	158	98
31	105	66	41	57	57	57	1880	306	148			
Total	3556	2726	2179	1454	1507	1835	20097	61310	33880	10736	7191	3508
Mean.	115	90.9	70.3	46.9	52.0	59.2	670	1978	1129	346	232	117
Max..	155	113	80	56	63	63	1660	2440	1820	583	386	168
Min...	97	66	57	39	36	57	55	1250	699	219	133	77
Acre-ft.	7050	5410	4320	2880	2990	3640	39860	121600	67200	21290	14260	6960

Total run-off for water year 1935-36=297,500 acre-feet.

Discharge of Henson Creek at Lake City, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	25	..	..	..	..	..	36	179	332	117	74
2	39	27	..	..	..	..	..	34	187	326	104	68
3	39	25	..	..	..	..	..	34	270	306	98	64
4	37	25	..	..	..	..	..	34	356	281	98	61
5	36	25	..	..	..	..	..	34	405	257	98	57
6	35	28	..	..	*12	..	..	38	438	244	91	60
7	35	28	*15	..	..	..	..	40	464	252	96	74
8	35	28	..	..	..	..	..	41	509	244	104	71
9	34	28	..	..	..	..	..	41	611	262	111	64
10	34	28	..	..	*17	..	..	53	666	265	121	58
11	34	30	..	*14	..	..	..	57	702	254	106	56
12	34	30	..	..	..	..	..	69	695	244	93	50
13	34	30	..	..	..	..	..	69	731	223	85	47
14	34	30	..	..	..	..	..	68	796	213	77	46
15	33	30	..	..	..	..	..	67	724	196	77	47
16	30	25	..	..	..	..	..	78	590	183	86	42
17	31	25	..	..	..	..	..	82	448	174	80	40
18	31	25	..	..	..	..	..	89	483	164	74	38
19	31	25	..	..	..	..	..	77	522	174	66	37
20	31	25	..	..	*15	..	..	77	566	179	62	36
21	31	22	..	..	..	..	..	79	577	168	64	36
22	31	22	..	..	..	..	..	96	509	166	64	36
23	31	22	..	..	..	..	..	132	532	154	76	35
24	30	22	..	..	..	..	..	170	480	138	77	36
25	30	22	..	..	..	..	..	201	410	130	77	46
26	30	20	..	..	..	..	..	231	410	122	74	53
27	30	20	..	..	..	..	..	260	380	106	83	60
28	29	20	..	..	..	..	..	249	304	115	91	61
29	29	20	..	..	..	..	..	236	326	121	78	58
30	26	20	..	..	..	..	..	260	338	121	77	56
31	23	..	..	..	..	..	..	239	121	74	..	..
Total	1008	752	..	..	..	..	..	3271	14608	6235	2679	1567
Mean.	32.5	25.1	17	14	13	17	22	106	487	201	86.4	52.2
Max..	41	30	..	..	..	..	..	260	796	337	121	74
Min...	23	20	..	..	..	..	..	34	179	106	62	35
Acre-ft.	2000	1490	1050	861	722	1050	1310	6490	28970	12370	5310	3110

Total run-off for water year 1934-35=64,730 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of Henson Creek at Lake City, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	52	31	18	14	14	18	168	401	146	109	81	
2....	51	26	17	13	15	14	22	264	297	131	150	75
3....	51	25	17	13	14	14	23	382	230	127	146	79
4....	50	27	18	12	13	14	24	512	205	122	135	76
5....	47	35	19	12	13	15	26	548	184	114	133	72
6....	46	27	21	12	13	16	25	472	233	109	144	68
7....	46	28	21	11	14	15	32	303	345	106	135	63
8....	44	29	20	11	14	16	35	208	420	106	129	61
9....	42	29	18	11	14	17	36	162	440	116	113	57
10....	41	27	17	11	13	18	40	146	440	113	113	58
11....	40	26	18	12	12	16	52	162	416	144	111	62
12....	39	26	19	13	14	18	70	255	428	137	116	54
13....	37	28	21	14	16	20	84	331	420	109	157	50
14....	36	30	18	14	15	21	88	393	352	99	131	47
15....	35	31	16	14	15	20	94	460	345	101	113	43
16....	35	28	15	14	15	20	108	492	345	96	104	41
17....	34	30	12	13	14	21	122	516	342	94	104	39
18....	29	31	11	13	14	22	136	500	342	94	106	39
19....	32	30	11	13	14	20	150	520	324	94	102	38
20....	35	28	12	14	15	19	168	532	290	90	96	38
21....	33	24	13	15	15	20	214	488	271	94	90	38
22....	29	25	13	15	15	18	261	488	258	90	84	38
23....	28	26	14	14	14	17	271	500	267	83	79	38
24....	30	27	15	12	16	16	230	540	251	78	75	38
25....	30	28	15	13	15	16	248	596	230	76	71	37
26....	30	26	15	14	14	17	248	536	205	74	68	37
27....	31	24	16	14	14	18	226	520	190	75	67	38
28....	28	25	16	15	13	19	208	484	190	76	64	38
29....	29	23	16	15	13	19	199	548	193	76	67	34
30....	28	19	16	13	....	17	148	532	162	80	79	34
31....	28	....	14	13	....	15	460	460	92	83	....	....
Total	1146	819	502	407	410	542	3606	13018	9016	3142	3274	1511
Mean.	37.0	27.3	16.2	13.1	14.1	17.5	120	420	301	101	106	50.4
Max..	52	35	21	15	16	22	271	596	440	146	157	81
Min..	28	19	11	11	12	14	18	146	162	74	64	34
Acre-ft.	2270	1620	996	807	813	1080	7150	25820	17880	6230	6490	3000

Total run-off for water year 1935-36=74,160 acre-feet.

Discharge of Lake Fork at Lake City, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	40	20	....	....	....	....	....	30	211	397	146	79
2....	40	18	....	....	....	....	....	31	188	401	132	76
3....	39	18	....	....	....	....	....	32	222	382	117	71
4....	39	19	....	....	....	....	....	33	321	345	112	67
5....	39	21	....	....	....	....	....	33	404	304	117	64
6....	39	22	....	....	....	....	....	34	513	285	121	60
7....	38	22	**20	....	*21	....	....	34	587	278	115	60
8....	37	22	....	....	....	....	....	34	672	294	112	64
9....	37	22	....	....	....	....	....	35	760	304	108	60
10....	35	22	....	*13	....	*14	....	36	780	382	112	59
11....	33	24	....	....	....	....	....	39	914	342	106	57
12....	32	24	....	....	....	....	....	100	914	318	100	52
13....	32	24	....	....	....	....	....	112	860	288	92	50
14....	33	24	....	....	....	....	....	82	986	269	83	48
15....	30	24	....	....	....	....	....	78	1040	239	76	46
16....	28	20	....	....	....	....	....	75	936	222	79	45
17....	28	20	....	....	....	....	....	73	634	204	80	43
18....	27	20	....	....	....	....	....	82	578	198	78	41
19....	27	20	....	....	....	....	*14	85	624	211	72	40
20....	25	20	....	....	....	....	....	85	701	245	67	38
21....	24	18	....	....	....	....	....	83	720	251	62	38
22....	23	18	....	....	....	....	....	82	682	245	63	36
23....	23	18	....	....	....	....	....	86	629	214	67	35
24....	23	18	....	....	....	....	....	123	648	183	69	35
25....	22	18	....	....	....	....	....	164	556	171	68	37
26....	23	17	....	....	....	....	....	193	505	155	66	39
27....	23	17	....	....	....	....	....	225	517	138	68	40
28....	22	17	....	....	....	....	....	257	440	136	79	42
29....	22	17	....	....	....	....	....	251	385	155	85	43
30....	21	17	....	....	....	....	....	254	412	169	85	43
31....	20	....	....	....	....	....	....	251	....	160	83	....
Total	924	601	558	527	448	496	750	3112	18339	7885	2820	1508
Mean.	29.8	20.0	18.0	17.0	16.0	16.0	25.0	100	611	254	91.0	50.3
Max..	40	24	....	....	....	....	....	257	1040	401	146	79
Min..	20	17	....	....	....	....	....	30	188	136	62	35
Acre-ft.	1830	1190	1110	1050	889	984	1490	6170	36370	15640	5590	2990

Total run-off for water year 1934-35=75,300 acre-feet.

*Discharge measurement.

Discharge of Lake Fork at Lake City, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	23	18	13	12	17	15	166	385	153	104	83
2	43	24	18	14	12	17	15	195	322	132	127	79
3	42	23	18	14	11	17	15	276	255	119	162	80
4	42	22	19	14	10	16	15	400	210	108	175	89
5	41	24	20	14	10	16	16	502	184	100	175	85
6	40	21	21	13	10	15	18	528	190	97	188	79
7	38	22	21	12	10	15	19	396	227	92	190	75
8	38	21	21	12	10	15	20	282	308	89	168	69
9	38	22	21	12	9	15	22	218	377	97	149	67
10	38	22	20	13	8	15	24	184	412	100	142	63
11	36	22	19	14	9	14	30	166	408	113	129	63
12	36	22	19	14	9	14	36	193	408	153	117	63
13	35	22	20	14	9	14	46	261	404	129	125	60
14	35	22	21	14	9	14	58	329	369	113	127	59
15	34	22	20	15	9	14	71	404	312	127	117	57
16	32	21	18	14	10	14	90	460	329	119	106	52
17	31	21	15	14	11	14	115	448	326	106	99	51
18	31	21	13	13	12	13	150	444	319	100	96	50
19	31	22	13	13	13	13	188	420	312	106	97	49
20	33	21	14	13	13	13	179	472	291	106	97	47
21	32	20	14	13	13	13	184	443	248	96	96	45
22	30	19	14	13	14	13	227	416	227	96	92	43
23	29	20	15	13	14	13	273	428	240	91	83	41
24	29	20	15	13	15	13	240	440	240	82	76	38
25	28	21	15	13	15	13	230	524	215	79	71	37
26	28	21	16	13	16	13	222	573	197	78	67	36
27	28	20	16	13	16	14	220	532	197	72	63	36
28	27	20	16	13	16	14	213	502	186	73	62	37
29	26	19	15	12	17	15	210	502	182	80	63	37
30	25	19	14	12	15	15	186	550	171	92	67	36
31	23	13	12	12	15	15	452	102	80			
Total	1042	639	532	409	342	446	3347	12111	8451	3200	3510	1706
Mean.	33.6	21.3	17.2	13.2	11.8	14.4	112	391	282	103	113	56.9
Max.	43	24	21	15	17	17	273	573	412	153	190	89
Min.	23	19	13	12	8	13	15	166	171	72	62	36
Acre-ft.	2070	1270	1060	811	678	885	6640	24020	16760	6350	6960	3380

Total run-off for water year 1935-36 = 70,880 acre-feet.

Discharge of East Muddy Creek Near Ragged Mountain, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	337	44	5.8	22
2	356	40	5.1	10
3	387	35	4.3	6
4	419	32	4.3	5
5	445	27	4.3	5
6	445	25	4.6	5
7	432	23	5.4	5
8	406	21	5.8	7
9	381	19	6.1	9
10	387	17	5.4	12
11	368	17	4.6	8
12	325	15	5.8	5
13	306	13	5.1	5
14	318	11	5.4	5
15	294	10	4.8	4
16	238	12	5.1	5
17	250	177	14	6.4
18	275	144	16	6.4
19	233	129	18	4.8
20	238	125	20	4.6
21	281	125	16	4.8
22	331	117	14	6.4
23	381	101	10	7.7
24	445	87	8	7.7
25	485	76	6	55
26	485	72	5	63
27	518	69	4.3	8
28	485	62	3.6	29
29	419	56	3.6	7
30	432	50	3.8	23
31	394	61	23	6
Total	5652	7234	509.4	377.7
Mean.	May 17	241	16.4	12.2
Max.	to 31	445	44	6.7
Min.	50	3.6	4.3
Acre-ft.	11210	14350	1010	401

Total run-off for the period = 27,720 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of East Muddy Creek Near Ragged Mountain, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	6.0	3.7	....	....	....	....	22	350	128	19	7.7	7.7
2....	6.0	4.6	....	....	....	....	19	399	120	17	7.7	1.3
3....	7.5	3.3	....	....	....	....	19	480	99	14	12	1.6
4....	9.6	12	....	....	....	....	23	594	79	15	12	1.8
5....	9.6	8.3	....	....	....	....	20	658	71	12	10	2.2
6....	7.1	10	....	....	....	....	18	555	68	10	14	2.2
7....	4.6	7.7	....	....	....	....	19	357	62	8.3	13	1.2
8....	4.2	5.8	....	....	....	....	20	304	63	7.7	10	1.2
9....	4.6	7.7	....	....	....	....	24	285	75	6.5	8.3	1.3
10....	3.7	8.3	....	....	....	....	34	255	90	4.6	7.1	1.2
11....	4.2	5.8	....	....	....	....	59	292	86	15	9.6	5.2
12....	5.8	4.6	....	....	....	....	92	330	77	21	12	2.4
13....	5.2	7.7	....	....	....	....	125	380	77	15	12	1.3
14....	3.7	6.5	....	....	....	....	148	365	73	12	12	1.2
15....	3.3	4.6	....	....	....	....	189	400	65	8.3	8.3	1.0
16....	5.2	5.2	....	....	....	....	220	430	60	6.5	3.7	1.2
17....	3.3	3.3	....	....	....	....	249	395	55	6.5	1.8	1.0
18....	4.2	2.8	....	....	....	....	267	340	46	9.6	4.6	1.0
19....	4.6	3.3	....	....	....	....	231	304	41	6.5	11	1.0
20....	6.5	....	....	....	....	....	279	320	38	4.6	13	1.0
21....	5.2	....	....	....	....	....	364	279	31	4.6	13	.8
22....	3.7	....	....	....	....	....	406	267	27	3.7	11	1.0
23....	2.8	....	....	....	....	....	385	249	25	3.3	5.2	1.6
24....	3.7	....	....	....	....	....	24	357	225	22	3.3	2.0
25....	7.1	....	....	....	....	....	28	371	207	22	8.9	3.7
26....	14	....	....	....	....	....	28	378	180	25	10	3.3
27....	12	....	....	....	....	....	27	350	170	24	6.5	1.2
28....	8.9	....	....	....	....	....	28	357	152	21	5.2	4.6
29....	4.2	....	....	....	....	....	25	371	139	20	4.2	1.3
30....	4.2	....	....	....	....	....	18	350	137	19	4.2	2.2
31....	4.2	....	....	....	....	....	18	137	....	5.8	18	....
Total	178.9	115.2	....	....	....	....	196	5766	9935	1709	278.8	252.1
Mean.	5.77	Nov. 1	....	....	....	....	Mar. 24	192	320	57.0	8.99	8.13
Max..	11	to 19	....	....	....	....	to 31	406	658	128	21	18
Min..	2.8	....	....	....	....	....	....	18	137	19	3.3	.6
Acre-ft.	355	228	....	....	....	....	389	11440	19710	3390	553	500
												137

Total run-off for the period=36,702 acre-feet.

Discharge of East Muddy Creek Near Bardine, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	361	82	27	40
2....	395	80	26	13
3....	425	78	26	11
4....	445	70	24	16
5....	470	61	16	13
6....	455	59	18	11
7....	440	57	19	24
8....	424	52	23	37
9....	442	50	26	23
10....	446	48	29	24
11....	433	46	24	24
12....	390	42	19	19
13....	382	42	16	16
14....	386	35	16	23
15....	378	31	16	21
16....	357	31	21	16
17....	320	33	23	23
18....	332	300	35	16
19....	296	280	35	24
20....	296	204	40	18
21....	332	200	44	18
22....	382	193	42	19
23....	428	176	38	12
24....	503	160	29	15
25....	517	138	26	61
26....	530	117	24	52
27....	544	115	27	31
28....	512	106	26	31
29....	455	95	23	26
30....	455	90	21	23
31....	442	31	48	11
Total	6024	9123	1338	768
Mean.	May 18	304	43.2	21.7
Max..	to 31	470	82	40
Min..	90	21	15
Acre-ft.	11950	18100	2650	1520
												1290

Total run-off for the period=35,510 acre-feet.

TWENTY-EIGHTH BIENNIAL REPORT

Discharge of East Muddy Creek Near Bardine, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	16	.	.	.	.	35	340	160	63	21	15
2	24	16	.	.	.	.	44	396	148	57	23	12
3	24	15	.	.	.	.	23	494	138	44	23	12
4	21	13	.	.	.	.	26	660	135	35	24	11
5	11	19	.	.	.	.	24	678	135	38	23	11
6	9.8	19	.	.	.	.	23	595	135	35	19	11
7	9.8	15	.	.	.	.	26	433	132	35	19	11
8	9.8	13	.	.	.	.	31	380	138	35	26	9.0
9	11	16	.	.	.	.	29	330	142	31	18	9.0
10	11	18	.	.	.	.	35	316	145	31	17	9.8
11	11	15	.	.	.	.	66	380	132	48	18	9.8
12	11	15	.	.	.	.	98	449	123	55	21	9.8
13	12	19	.	.	.	.	135	482	117	50	21	11
14	13	13	.	.	.	.	176	449	106	46	21	11
15	15	11	.	.	.	.	246	494	103	44	21	11
16	13	18	.	.	.	.	306	538	101	42	19	9.8
17	11	15	.	.	.	.	288	505	92	46	19	9.8
18	12	12	.	.	.	.	375	449	82	46	23	11
19	12	12	.	.	.	.	335	385	70	46	26	9.8
20	11	12	.	.	.	.	380	428	68	44	23	9.8
21	13	12	.	.	.	.	466	390	61	29	21	9.8
22	15	12	.	.	.	.	499	364	63	24	20	9.8
23	13	13	.	.	.	.	471	354	66	19	15	9.8
24	12	13	.	.	.	.	31	433	288	61	18	9.8
25	13	13	.	.	.	.	52	428	242	59	19	11
26	16	13	.	.	.	.	50	449	218	61	26	10
27	9.8	12	.	.	.	.	42	460	197	57	23	8.0
28	6.6	12	.	.	.	.	23	438	170	61	21	6.0
29	16	11	.	.	.	.	26	433	160	66	20	8.0
30	19	11	.	.	.	.	24	375	160	68	19	9.0
31	16	.	.	.	.	.	26	160	.	19	13	.
Total	425.8	424	.	.	.	.	274	7153	11884	3038	1117	556.0
Mean.	13.7	14.1	.	.	.	.	Mar. 24	238	383	101	36.0	18.0
Max..	24	19	.	.	.	.	to 31	499	678	160	63	26
Min...	6.6	11	.	.	.	.	.	23	160	57	18	6.0
Acre-ft.	845	841	.	.	.	.	543	14190	23570	6030	2220	1100
												613

Total run-off for the period = 49,952 acre-feet.

Discharge of North Fork of Gunnison River Near Somerset, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	53	.	.	.	.	170	744	1860	872	152	161
2	52	72	.	.	.	.	194	690	1840	816	138	120
3	53	54	.	.	.	.	227	658	2040	808	130	109
4	52	59	.	.	.	.	207	602	2270	723	118	97
5	53	58	.	.	.	.	210	614	2410	658	113	92
6	54	56	.	.	.	.	179	737	2580	590	101	92
7	58	58	.	.	.	.	149	765	2650	584	103	128
8	54	56	.	.	.	.	204	1080	2690	584	115	198
9	52	56	.	.	.	.	210	1310	2670	578	138	155
10	52	54	.	.	.	.	164	1520	2810	542	113	128
11	52	52	.	.	.	.	139	1690	2820	497	130	113
12	52	50	.	.	.	.	164	1800	2770	459	155	103
13	52	52	.	.	.	.	220	1930	2720	448	140	95
14	50	50	.	.	.	.	314	1760	2760	401	138	88
15	47	50	.	.	.	.	414	1550	2740	356	115	88
16	48	50	.	.	.	.	536	1620	2380	323	132	88
17	47	56	.	.	.	.	548	1650	1850	291	128	86
18	47	60	.	.	.	.	454	1680	1670	295	120	83
19	50	60	.	.	.	.	459	1470	1750	291	109	81
20	53	56	.	.	.	.	621	1440	1860	318	97	76
21	50	56	.	.	.	.	100	832	1470	1870	282	97
22	47	54	.	.	.	.	115	979	1690	1700	269	105
23	50	52	.	.	.	.	106	856	1970	1620	248	115
24	50	54	.	.	.	.	106	765	2340	1500	217	111
25	48	41	.	.	.	.	98	602	2520	1290	194	158
26	48	50	.	.	.	.	110	548	2650	1170	188	125
27	46	59	.	.	.	.	130	548	2780	1170	167	135
28	44	83	.	.	.	.	117	627	2650	1040	167	118
29	44	70	.	.	.	.	151	710	2380	925	149	115
30	46	65	.	.	.	.	162	824	2310	934	149	113
31	45	.	.	.	.	.	185	185	2170	167	132	.
Total	1549	1696	.	.	.	.	1380	13074	50240	60359	12631	3864
Mean.	50	56.5	.	.	.	.	Mar. 21	436	1621	2012	407	125
Max..	58	83	.	.	.	.	to 31	979	2780	2820	872	180
Min...	44	41	.	.	.	.	.	139	602	925	145	97
Acre-ft.	3070	3360	.	.	.	.	2740	25930	99650	119700	25050	7660
												6630

Total run-off for the period = 293,790 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of North Fork of Gunnison River Near Somerset, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	132	65	50	48	48	70	107	1830	1760	459	158	150
2....	111	75	48	47	53	68	90	1970	1480	397	142	127
3....	107	70	48	53	55	72	87	2600	1190	378	153	116
4....	105	76	47	52	51	68	84	3130	1020	358	142	111
5....	101	49	44	50	50	76	86	3300	945	335	139	102
6....	97	75	46	49	52	83	79	3250	870	326	183	100
7....	92	75	47	51	52	95	94	2530	960	299	183	96
8....	90	74	48	48	53	105	132	2000	1270	278	177	96
9....	86	73	43	47	54	111	161	1660	1440	273	139	94
10....	81	75	44	49	55	135	211	1660	1450	273	120	98
11....	83	73	41	54	57	125	321	2010	1460	387	116	107
12....	80	58	43	52	56	122	486	2400	1380	433	125	107
13....	81	68	44	52	54	140	672	2630	1350	358	145	105
14....	81	73	41	51	54	140	855	2600	1300	312	150	102
15....	80	68	39	52	52	132	1050	2750	1210	290	122	98
16....	78	62	39	54	53	120	1370	2780	1180	273	111	92
17....	75	65	40	56	51	118	1540	2820	1080	265	122	90
18....	73	75	42	54	52	120	1730	2600	1020	265	120	92
19....	75	72	41	52	52	109	1600	2420	990	265	118	90
20....	78	55	42	54	53	111	1750	2400	938	222	139	86
21....	85	51	44	59	54	132	2060	2370	848	187	187	82
22....	80	61	46	61	57	150	2310	2300	848	164	164	78
23....	78	70	48	58	56	139	2470	2190	767	153	142	74
24....	78	67	49	60	54	113	2250	2110	719	148	127	71
25....	81	75	48	63	55	107	2240	2110	705	145	120	68
26....	73	67	47	64	62	98	2360	2070	855	174	120	76
27....	73	61	46	60	70	98	2410	2000	685	167	111	89
28....	72	62	47	49	70	96	2330	1880	590	167	107	90
29....	78	46	48	51	76	102	2360	1810	596	174	103	86
30....	75	51	49	47	....	113	2060	1860	560	187	100	82
31....	72	....	48	44	....	129	2060	1860	....	158	116	....
Total	2631	1987	1397	1641	1611	3397	35355	71900	31466	8270	4201	2855
Mean.	84.9	66.2	45.1	52.9	55.6	110	1178	2319	1049	267	136	95.2
Max..	132	76	50	64	76	150	2470	3300	1760	450	187	150
Min..	72	46	39	44	48	68	79	1660	560	145	100	68
Acre-ft.	5220	3940	2770	3250	3200	6740	70130	142600	62410	16400	8330	5660

Total run-off for water year 1935-36=330,600 acre-feet.

Discharge of Gunnison River Near Grand Junction, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	228	268	756	744	808	676	860	2100	7370	4520	1030	909
2....	259	295	686	638	737	740	853	1900	6440	4060	1130	1020
3....	249	289	703	655	766	756	778	1640	5960	3920	1020	1000
4....	202	323	690	649	722	771	802	1500	6680	3900	926	891
5....	200	435	679	652	714	768	763	1340	7700	3530	878	739
6....	198	396	726	634	714	726	695	1270	8840	3030	952	607
7....	198	402	703	626	726	666	622	1460	9690	2740	948	574
8....	198	442	742	670	772	666	499	1810	10600	2650	895	928
9....	198	459	776	751	757	703	465	2510	11500	2680	951	1120
10....	196	434	807	795	737	708	499	3120	12400	2580	1100	1280
11....	196	445	841	771	726	689	462	3640	13600	2710	1200	1130
12....	198	435	863	834	695	651	343	3950	14500	2660	1140	1020
13....	198	435	851	838	595	648	288	4360	14600	2720	1050	935
14....	204	452	840	774	616	681	288	5060	14700	2590	928	829
15....	365	439	879	771	594	756	383	4790	15500	2340	775	766
16....	316	442	966	821	577	843	510	4450	15800	2060	683	688
17....	326	444	975	805	539	845	1110	3980	13200	1840	682	654
18....	408	485	869	712	431	787	1230	4100	10900	1610	765	580
19....	397	519	803	647	543	791	1040	4200	9150	1940	817	533
20....	307	563	743	647	730	776	953	3840	9610	1920	793	517
21....	315	635	797	647	734	760	1170	3910	10100	2330	711	453
22....	323	674	807	455	745	696	1740	4330	10200	2260	639	397
23....	301	678	847	540	761	696	2120	4640	9280	2230	626	411
24....	315	682	823	640	754	725	2160	5440	8870	2140	669	397
25....	301	699	823	730	734	762	1900	6460	8190	1670	608	550
26....	296	767	803	790	738	773	1530	7320	6990	1380	854	1020
27....	288	799	760	790	695	758	1140	7900	6110	1700	948	1300
28....	260	755	713	785	622	756	1110	8470	5780	1500	1080	1850
29....	296	615	756	790	....	713	1550	8480	5100	921	1140	1760
30....	292	763	779	865	....	709	1920	8070	4550	1260	1060	1630
31....	290	....	784	845	....	694	....	7800	....	1090	1010	....
Total	8318	15469	24590	22311	19282	22689	29783	133810	293910	74481	28008	26488
Mean.	268	516	793	720	689	732	993	4317	9797	2403	903	883
Max..	408	799	975	865	808	845	2160	8480	15800	4520	1200	1850
Min..	196	268	679	455	431	648	288	1270	4550	921	608	397
Acre-ft.	16500	30680	48770	44250	38250	45000	59070	265500	583000	147700	55550	52540

Total run-off for water year 1934-35=1,387,000 acre-feet.

Note: Includes diversion by Redlands Power Canal.

Discharge of Gunnison River Near Grand Junction, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	1550	1160	841	805	694	763	925	9270	9240	2620	1100	1390
2....	1450	1100	821	805	734	767	914	8220	8740	2230	1400	1740
3....	1300	1080	801	821	798	791	788	8020	7500	1880	1260	1400
4....	1260	1120	837	825	841	795	670	10300	6030	1580	1360	1410
5....	1170	1130	841	825	823	830	420	13000	5090	1340	1680	1300
6....	1120	1090	895	822	710	852	450	14400	4440	1250	2050	1280
7....	1070	1020	971	814	793	868	594	14700	4580	1130	2730	1200
8....	999	1060	996	806	779	886	708	12200	4670	1010	2500	1070
9....	944	1080	946	798	852	898	665	9330	5460	911	2200	961
10....	909	1060	913	790	816	907	790	7380	6210	869	1960	893
11....	877	1090	852	803	816	947	1120	6860	6480	1230	1750	878
12....	854	1110	790	819	834	919	1490	7220	6450	1470	1570	863
13....	859	1050	834	823	879	891	1880	8540	6250	1820	1360	968
14....	847	1020	873	828	798	909	2510	9980	6240	1490	1680	961
15....	856	1020	870	846	834	956	3500	10500	5990	1170	1560	879
16....	843	1010	775	860	834	972	4540	11500	5670	1110	1300	834
17....	843	994	695	878	789	922	5940	12300	5680	1080	1110	778
18....	847	974	642	842	630	907	6300	12300	5160	1180	1090	717
19....	953	1000	613	791	536	925	7210	11600	4720	1250	941	895
20....	869	1030	673	774	605	907	7390	11100	4400	1280	981	990
21....	918	979	719	782	772	911	7850	11200	4040	1100	1050	742
22....	959	924	719	814	798	961	8960	10700	3700	974	1110	619
23....	963	912	771	823	808	1060	9680	10100	3590	895	1090	538
24....	1000	935	811	818	830	1050	10900	9860	3540	876	962	492
25....	1040	944	807	814	903	972	10400	9490	3310	709	806	458
26....	1100	951	808	798	817	949	10200	9970	3080	619	690	433
27....	1130	1010	800	818	757	904	10100	10100	3250	616	625	454
28....	1130	1010	784	798	776	831	10600	9790	3150	671	544	512
29....	1150	935	824	814	764	831	9660	9990	2830	600	484	621
30....	1130	909	828	823	....	851	9820	8920	2740	843	476	683
31....	1140	....	820	790	....	889	....	9330	....	841	597	26....
Total	32080	30707	25170	25267	22620	27821	146974	317270	152230	36644	40016	26959
Mean.	1035	1024	812	815	780	897	4899	10230	5074	1182	1291	899
Max..	1550	1160	996	878	903	1060	10900	14700	9240	2620	2730	1740
Min...	843	909	613	774	536	763	420	6860	2740	616	476	433
Acre-ft.	63630	60910	49920	50120	44870	55180	291500	629300	301900	72680	79370	53470

Total run-off for water year 1935-36=1,753,000 acre-feet.

Note: Includes diversion by Redlands Power Canal.

Discharge of Surface Creek at Cedaredge, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	4.0	4.0	....	....	....	4.0	2.8	26	82	54	20	20
2....	3.7	4.0	....	....	....	4.0	2.3	20	90	56	19	29
3....	3.4	3.7	....	....	....	4.0	1.7	18	92	56	18	32
4....	2.8	4.6	....	....	....	4.0	1.1	18	108	56	18	31
5....	2.6	4.0	....	....	....	4.0	1.7	26	100	57	15	31
6....	2.6	3.7	....	....	....	4.0	1.1	42	96	54	18	13
7....	2.3	3.1	....	....	....	4.0	2.3	44	84	47	26	18
8....	2.3	2.8	....	....	....	4.0	5.2	63	81	44	26	30
9....	2.3	3.5	....	....	....	4.0	4.6	71	82	39	20	32
10....	2.0	4.0	....	....	....	4.0	4.0	69	98	42	13	30
11....	1.7	5.0	....	....	....	4.0	3.7	69	108	38	8.2	28
12....	1.7	5.0	....	....	....	4.0	5.2	71	98	40	5.8	26
13....	1.4	5.0	....	....	....	4.0	7.0	79	92	38	7.6	22
14....	1.4	5.0	....	....	....	4.0	12	64	122	32	8.2	17
15....	1.4	5.0	....	....	....	4.0	20	66	119	32	11	14
16....	3.4	5.0	....	....	....	4.0	24	76	108	32	14	12
17....	3.7	5.0	....	....	....	4.0	19	73	124	26	14	12
18....	3.4	5.0	....	....	....	4.0	12	64	108	23	15	14
19....	3.4	5.0	....	....	....	4.0	17	68	88	23	13	16
20....	3.1	5.0	....	....	....	4.0	29	71	81	31	13	14
21....	4.0	5.0	....	....	....	3.2	35	78	86	31	16	14
22....	4.0	5.0	....	....	....	2.4	40	79	73	33	19	8.2
23....	5.2	5.0	....	....	....	2.0	36	79	71	29	17	5.8
24....	4.6	5.0	....	....	....	1.5	31	92	82	31	14	7.0
25....	5.2	5.0	....	....	....	1.1	13	102	79	28	12	13
26....	3.4	5.0	....	....	....	0.7	14	102	73	24	22	14
27....	3.4	5.0	....	....	....	0.9	23	105	69	19	23	14
28....	4.0	5.0	....	....	....	2.6	36	96	71	20	26	15
29....	4.6	5.0	....	....	....	3.1	50	92	62	28	24	14
30....	5.2	5.0	....	....	....	3.7	44	94	50	32	25	12
31....	4.6	....	....	....	....	4.0	....	84	26	22	....	....
Total	100.8	137.4	93	93	84	105.2	497.7	2101	2677	1121	522.8	558.0
Mean.	3.25	4.58	3	3	3	3.39	16.6	67.8	89.2	36.2	16.9	18.6
Max..	5.2	5.0	....	....	....	4.0	50	105	124	57	26	32
Min...	1.4	2.8	....	....	....	0.7	1.1	18	50	19	5.8	5.8
Acre-ft.	200	273	184	184	167	209	987	4170	5310	2220	1040	1110

Total run-off for water year 1934-35=16,050 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Surface Creek at Cedaredge, Colorado, for Year Ending September 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	10	4.5	....	....	....	4	2.1	63	70	32	17	19
2....	9.4	4.5	....	....	....	4	4.1	85	74	34	18	16
3....	8.8	3.6	....	....	....	4	2.8	115	85	31	18	18
4....	8.2	3.6	....	....	....	4	2.3	136	83	25	14	16
5....	7.0	3.6	....	....	....	4	2.3	143	72	25	15	13
6....	14	5.4	....	....	....	3.5	4.5	85	59	24	32	11
7....	13	8.7	....	....	....	3.5	4.5	53	52	22	31	11
8....	13	6.1	....	....	....	3.5	3.2	55	57	41	27	10
9....	12	6.1	....	....	....	3.5	3.0	52	59	41	25	8.0
10....	12	4.5	....	....	....	3.5	3.6	74	52	39	25	6.7
11....	11	3.6	....	....	....	3	6.1	89	45	41	24	5.4
12....	8.8	4.0	....	....	....	3	13	87	42	32	25	5.0
13....	7.6	4.4	....	....	....	3	19	76	35	29	26	11
14....	7.0	4.0	....	....	....	3	33	64	34	23	22	9.4
15....	6.4	4.0	....	....	....	3	32	83	35	24	19	8.7
16....	5.8	3.2	....	....	....	2.5	63	112	35	25	20	5.4
17....	4.6	3.4	....	....	....	2.5	83	126	31	26	20	5.4
18....	3.4	4.0	....	....	....	2.5	83	130	26	25	24	5.4
19....	2.8	3.8	....	....	....	2.5	49	123	26	21	24	4.5
20....	4.0	3.4	....	....	....	2.1	101	112	25	20	28	4.5
21....	7.6	3.0	....	....	....	2.1	94	92	22	19	24	5.0
22....	5.2	2.8	....	*4.1	....	2.3	89	81	20	18	25	4.1
23....	7.6	5.4	....	....	....	2.5	130	70	21	18	27	2.5
24....	6.4	6.7	....	....	....	4.1	78	72	22	21	23	4.1
25....	5.8	3.2	....	....	*4.2	3.6	74	74	22	22	23	3.6
26....	4.6	3.0	....	....	....	4.5	74	78	24	21	25	3.6
27....	5.4	3.0	....	....	....	4.0	72	55	21	18	23	6.7
28....	6.1	3.2	....	....	....	3.4	87	72	23	17	22	6.7
29....	6.7	3.0	....	....	....	2.8	76	72	27	17	18	5.4
30....	5.0	3.0	....	....	....	2.5	63	70	31	13	19	5.4
31....	3.6	....	....	....	....	2.1	78	78	13	22	22	2.5
Total	232.8	124.7	108.5	124	116	98.5	1351.5	2677	1230	777	705	240.5
Mean.	7.51	4.16	3.5	4.0	4.0	3.18	45.0	86.4	41.0	25.1	22.7	8.02
Max..	14	8.7	....	....	....	4.5	130	143	85	41	32	19
Min...	2.8	2.8	....	....	....	2.1	2.1	52	20	13	14	2.5
Acre-ft.	462	247	215	246	230	195	2680	5310	2440	1540	1400	477

Total run-off for water year 1935-36=15,440 acre-feet.

Discharge of Uncompahgre River at Colona, Colorado, for Year Ending Sept. 30, 1935												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	77	49	....	....	....	91	115	340	841	388	282	
2....	77	58	....	....	....	98	109	295	828	320	256	
3....	75	54	....	....	....	96	109	413	802	282	226	
4....	73	51	....	....	....	91	96	591	750	296	206	
5....	70	50	....	....	....	89	89	704	680	316	184	
6....	68	54	....	....	....	86	104	828	610	269	169	
7....	64	58	....	....	....	71	93	741	591	247	269	
8....	62	56	....	....	....	75	93	787	585	292	251	
9....	67	54	....	....	....	73	96	975	603	311	206	
10....	67	54	....	....	....	67	117	1130	622	340	187	
11....	68	54	....	....	....	66	142	1200	622	282	176	
12....	75	58	....	....	....	66	149	1280	654	234	166	
13....	75	58	....	....	....	82	89	164	1270	591	198	152
14....	75	58	....	....	....	109	112	149	1590	560	176	143
15....	75	59	....	....	....	117	117	156	1480	535	180	136
16....	77	60	....	....	....	91	127	168	1400	498	238	140
17....	77	68	....	....	....	91	127	164	999	456	242	133
18....	70	64	....	....	....	75	109	242	992	438	222	119
19....	68	62	....	....	....	71	96	485	1130	554	191	108
20....	68	64	....	....	....	64	106	354	1220	535	176	90
21....	62	73	....	....	....	73	93	313	1360	585	169	89
22....	59	71	....	....	....	82	93	349	1340	548	173	87
23....	56	71	....	....	....	84	93	418	1280	444	187	82
24....	51	75	....	....	....	84	93	456	1300	399	187	75
25....	52	77	....	....	....	82	104	500	1090	346	210	140
26....	51	79	....	....	....	82	138	495	1040	311	230	156
27....	50	79	....	....	....	86	180	490	978	278	356	234
28....	47	79	....	....	....	80	184	409	815	292	372	194
29....	47	79	....	....	....	80	145	423	789	330	306	173
30....	46	79	....	....	....	86	127	476	848	346	316	166
31....	46	....	....	....	....	91	....	476	382	282	282	282
Total	1995	1905	....	....	....	1676	3111	7999	30205	16616	7988	5001
Mean.	64.4	63.5	....	....	....	Mar. 12	104	258	1007	536	258	167
Max..	77	79	....	....	....	to 31	184	500	1590	841	388	282
Min...	46	49	....	....	....	....	66	89	295	278	169	75
Acre-ft.	3960	3780	....	....	....	3320	6170	15870	59910	32960	15840	9920

Total run-off for the period=151,730 acre-feet.

*Discharge measurement.

Discharge of Uncompahgre River at Colona, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	153	113	84	.....	.....	80	73	320	651	320	144	122
2	150	119	79	.....	.....	85	66	403	491	277	153	113
3	150	116	79	.....	.....	85	79	554	361	245	224	122
4	160	113	79	.....	.....	90	73	682	296	220	263	113
5	150	93	82	.....	.....	95	73	779	259	220	259	107
6	140	98	79	.....	.....	100	68	701	254	211	496	104
7	134	98	76	.....	.....	107	71	457	356	199	458	92
8	128	96	73	.....	.....	107	98	356	560	196	396	87
9	122	96	76	.....	.....	113	113	311	657	196	277	85
10	116	98	66	.....	.....	134	104	286	676	196	246	85
11	110	98	79	.....	.....	93	125	291	645	325	238	101
12	107	98	73	.....	.....	90	207	350	670	311	255	85
13	107	96	71	.....	.....	98	320	414	688	220	306	85
14	98	90	68	.....	.....	93	340	424	651	196	246	82
15	98	82	60	.....	.....	90	382	468	584	177	200	79
16	98	87	57	.....	.....	82	463	514	645	181	188	77
17	98	87	57	.....	.....	93	463	584	632	192	184	72
18	87	90	57	.....	.....	93	452	537	602	181	188	67
19	93	87	57	.....	.....	82	408	525	560	184	200	67
20	119	79	57	.....	.....	84	424	682	525	177	217	65
21	107	79	58	.....	.....	90	474	639	457	163	221	62
22	96	82	58	*58	.....	93	514	708	446	156	192	62
23	93	87	58	.....	.....	90	531	727	430	134	168	62
24	110	84	58	.....	.....	71	446	720	441	122	153	58
25	116	87	58	.....	*74	82	441	873	414	101	136	56
26	116	87	60	.....	.....	73	419	853	387	96	116	56
27	116	82	60	.....	.....	76	397	740	371	90	113	58
28	119	82	60	.....	.....	90	387	688	340	93	95	67
29	119	76	60	.....	.....	84	387	753	392	107	90	65
30	113	82	60	.....	.....	79	325	853	371	113	98	62
31	110	60	.....	.....	.....	82	.....	746	.....	98	116	.....
Total	3633	2762	2059	1922	1972	2804	8723	17938	14812	5697	6636	2418
Mean.	117	92.1	66.4	62	68	90.5	291	579	494	184	214	80.6
Max..	160	119	84	....	....	134	531	873	688	325	496	122
Min...	87	76	57	....	....	71	66	286	254	90	90	56
Acre-ft.	7210	5480	4080	3810	3910	5560	17300	35580	29380	11300	13160	4800

Total run-off for water year 1935-36=141,600 acre-feet.

Discharge of Kannah Creek, Below Intake, Near Whitewater, Colorado, For Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	1.4	.....	.....	.....	2.5	2.4	10	159	30	21	19
2	1.0	1.2	.....	.....	.....	2.5	1.3	8.1	218	28	23	13
3	1.1	1.7	.....	.....	.....	2.5	2.0	8.1	260	29	23	13
4	1.0	2.1	.....	.....	.....	2.5	1.9	8.8	337	26	23	13
5	0.9	1.8	.....	.....	.....	2.5	1.8	9.7	415	22	23	15
6	1.0	2.1	.....	.....	.....	3.0	0.9	11	494	23	19	18
7	1.1	2.0	.....	.....	.....	3.0	0.9	12	534	21	20	22
8	1.2	1.9	.....	.....	.....	3.0	0.9	14	565	21	22	22
9	1.0	1.8	.....	.....	.....	3.0	3.1	17	514	18	24	17
10	1.0	1.6	.....	.....	.....	3.0	1.8	18	480	18	25	12
11	1.0	1.4	.....	.....	.....	4.0	1.6	20	465	18	19	10
12	1.4	1.6	.....	.....	.....	4.0	2.1	21	406	25	14	9.7
13	1.7	1.6	.....	.....	.....	4.0	4.2	26	465	32	13	8.5
14	1.4	1.6	.....	.....	.....	4.0	6.9	26	394	27	12	7.5
15	1.4	1.4	.....	.....	.....	4.0	9.1	20	333	23	16	5.3
16	1.8	1.8	.....	.....	.....	4.5	9.4	19	292	23	24	3.4
17	1.3	2.4	.....	.....	.....	5.0	9.7	20	206	40	27	2.1
18	1.2	2.0	.....	.....	.....	5.5	6.7	32	179	43	28	1.8
19	1.6	2.1	.....	.....	.....	6.1	7.2	36	159	45	26	3.4
20	2.1	2.9	.....	.....	.....	5.5	11	29	145	50	27	2.1
21	1.6	2.4	.....	.....	.....	6.1	12	24	124	46	34	2.4
22	1.4	1.7	.....	.....	.....	6.1	12	30	102	43	33	2.0
23	1.3	2.0	.....	.....	.....	5.5	11	37	92	42	30	1.9
24	1.2	3.4	.....	.....	.....	3.7	10	45	70	41	26	2.4
25	1.9	2.6	.....	.....	.....	1.9	8.1	56	48	37	24	5.0
26	1.3	2.4	.....	.....	.....	2.6	7.2	78	50	37	18	6.1
27	1.1	1.8	.....	.....	.....	3.1	10	116	45	32	18	7.8
28	1.3	2.0	.....	.....	.....	2.6	11	137	40	32	14	6.4
29	1.2	2.0	.....	.....	.....	1.9	11	129	37	24	14	5.0
30	1.0	2.0	.....	.....	.....	2.6	11	134	32	23	18	4.2
31	1.0	.....	.....	.....	.....	2.6	11	145	22	16	16	.....
Total	39.5	58.7	62	62	70	112.8	188.2	1296.7	7660	941	674	261.0
Mean.	1.27	1.96	2.0	2.0	2.5	3.64	6.27	41.8	255	30.4	21.7	8.70
Max..	2.1	3.4	.....	.....	.....	6.1	12	145	565	50	34	22
Min...	0.9	1.2	.....	.....	.....	1.9	0.9	8.1	32	18	12	1.8
Acre-ft.	78	116	123	123	139	224	373	2570	15190	1870	1340	518

Total run-off for water year 1934-35=22,660 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

**Discharge of Kannah Creek Below Intake, Near Whitewater, Colorado,
For Year Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	4.2	4.7	3.5	....	1.5	1.4	1.4	97	56	36	14	11
2....	3.1	5.0	....	....	1.5	.9	1.6	127	69	33	16	6.2
3....	2.4	4.7	....	....	1.5	1.6	1.2	197	76	34	16	4.7
4....	2.4	3.9	....	....	1.5	1.9	1.4	256	74	31	14	3.5
5....	2.6	3.1	....	....	1.5	1.9	1.4	296	58	23	15	3.9
6....	2.6	5.4	....	....	1.2	2.5	1.4	241	49	36	18	3.5
7....	2.4	5.0	....	....	1.2	2.2	1.4	143	42	44	16	3.1
8....	2.6	5.0	....	....	1.2	2.8	2.2	115	37	44	16	2.8
9....	2.6	4.7	....	....	1.2	6.6	2.2	106	36	45	16	2.8
10....	2.9	5.0	....	....	1.2	7.0	3.1	121	34	45	16	3.1
11....	2.4	4.7	....	....	1.4	8.1	6.6	180	33	58	21	5.4
12....	2.0	4.3	....	....	1.4	6.2	14	219	30	47	21	4.3
13....	2.1	5.4	....	....	1.4	2.5	18	241	28	27	21	4.7
14....	2.4	4.7	....	....	1.4	2.5	23	234	26	22	14	2.2
15....	2.2	3.9	....	....	1.4	2.5	30	230	24	16	12	3.1
16....	2.8	4.7	....	....	1.2	2.2	34	284	24	12	17	2.8
17....	2.5	4.3	....	....	.9	2.2	34	249	23	8.1	17	1.9
18....	2.2	4.7	....	....	.9	2.2	33	222	21	9.2	14	1.4
19....	2.8	3.9	....	....	.9	1.9	31	215	18	8.1	8.1	1.4
20....	3.1	5.0	....	....	.9	2.2	36	190	18	6.6	8.1	1.4
21....	2.8	5.0	....	*1.4	1.2	2.2	39	153	16	6.2	19	1.4
22....	2.8	4.7	....	....	1.4	2.5	49	130	14	6.2	17	1.4
23....	3.5	4.7	....	....	1.4	2.2	58	103	15	5.8	14	1.9
24....	5.0	4.7	....	....	1.2	2.2	51	82	14	5.4	11	1.9
25....	5.0	4.3	....	....	.9	1.9	58	72	17	5.4	9.2	1.4
26....	5.0	4.7	....	....	.9	1.6	79	69	17	5.0	24	1.9
27....	5.4	4.7	....	....	.9	2.8	103	74	21	10	23	2.5
28....	5.4	4.7	....	....	.9	2.2	106	65	22	11	21	2.2
29....	5.4	4.2	....	....	1.2	2.2	118	56	28	14	18	1.9
30....	5.0	3.5	....	....	....	2.2	100	54	30	17	16	2.2
31....	4.3	....	....	....	....	2.2	....	56	....	17	14	....
Total	101.9	137.3	77.5	46.5	35.3	85.5	1037.9	4877	970	693.0	496.4	91.9
Mean	3.29	4.58	2.5	1.5	1.22	2.76	34.6	157	32.3	22.4	16.0	3.06
Max..	5.4	5.4	....	....	1.5	8.1	118	296	76	58	24	11
Min..	2.0	3.1	....	....	0.9	.9	1.2	54	14	5.0	8.1	1.4
Acre-ft.	202	272	154	92	70	170	2060	9670	1920	1370	985	182

Total run-off for water year 1935-36=17,150 acre-feet.

Discharge of Dolores River at Dolores, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	42	31	32	....	....	33	262	715	1510	1120	262	322
2....	40	31	....	....	....	33	295	596	1500	1040	230	288
3....	39	30	....	....	....	34	334	548	1880	984	201	242
4....	37	30	....	....	....	34	352	479	2150	920	236	214
5....	36	30	....	....	....	34	322	450	2350	816	250	199
6....	35	30	....	....	....	31	298	560	2620	728	219	178
7....	34	30	....	....	....	31	290	609	2740	702	199	191
8....	34	30	....	....	....	33	281	808	2740	662	209	308
9....	34	30	*32	....	....	33	291	952	2700	603	212	219
10....	34	30	....	....	....	33	209	1020	2580	682	278	201
11....	35	30	....	....	....	33	186	1160	2820	603	225	176
12....	37	30	....	....	....	35	244	1240	2730	548	247	157
13....	39	30	....	....	....	40	352	1330	2490	526	199	145
14....	38	30	....	....	....	55	536	1160	3000	474	169	136
15....	36	30	....	....	....	65	675	992	3190	500	157	126
16....	36	30	....	....	....	75	742	984	3020	405	222	120
17....	35	30	....	....	....	85	786	968	2170	380	242	109
18....	35	30	....	....	....	85	590	968	2150	460	236	101
19....	35	31	....	....	....	85	554	904	2260	515	196	97
20....	37	32	....	....	....	90	695	960	2530	515	169	93
21....	36	32	....	....	....	90	816	920	2620	441	157	93
22....	35	32	....	....	....	93	880	992	2450	405	164	97
23....	36	32	....	....	....	107	832	1150	2100	341	194	101
24....	34	32	....	....	....	85	636	1310	2130	295	376	103
25....	32	32	....	....	....	76	484	1540	1800	266	405	178
26....	32	32	....	....	....	81	510	1720	1640	233	372	230
27....	31	32	....	....	....	105	735	1690	1580	219	388	284
28....	31	32	....	....	....	120	936	1720	1500	239	460	266
29....	31	32	....	....	....	149	952	1800	1270	253	410	230
30....	31	32	....	....	....	201	872	1810	1220	256	372	209
31....	31	....	....	....	....	262	....	1790	284	356	....	....
Total	1088	925	992	899	868	2346	15947	33845	67440	16415	8012	5413
Mean	34.8	30.8	32	29	31	75.7	532	1092	2248	530	258	180
Max..	42	32	....	....	....	262	952	1810	3190	1120	460	322
Min..	31	30	....	....	....	31	186	450	1220	219	157	93
Acre-ft.	2160	1830	1970	1780	1720	4650	31630	67130	133800	32560	15890	10740

Total run-off for water year 1934-35=305,860 acre-feet.

*Discharge measurement.

Discharge of Dolores River at Dolores, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	186	66	....	....	....	50	131	1640	1630	298	191	308
2....	170	77	....	....	....	52	121	1860	1360	261	186	252
3....	158	73	....	....	....	60	181	2150	1150	239	284	261
4....	151	69	....	....	....	68	173	2300	1010	227	370	281
5....	140	54	....	....	....	76	149	2460	917	207	456	227
6....	131	45	....	....	....	82	117	2470	962	188	834	199
7....	123	64	....	....	....	80	142	1880	1040	170	685	173
8....	115	69	....	....	....	90	239	1470	1180	156	584	153
9....	111	63	....	....	....	105	370	1250	1230	153	491	140
10....	104	69	....	....	....	120	451	1160	1220	168	386	131
11....	102	50	....	....	....	142	662	1310	1200	330	374	158
12....	98	53	....	....	....	135	925	1540	1200	359	378	151
13....	95	69	....	*34	....	152	1220	1570	1120	242	374	133
14....	91	66	....	....	....	170	1430	1500	1030	194	322	121
15....	90	56	....	....	....	200	1500	1510	969	221	291	109
16....	85	59	....	....	....	233	1540	1720	903	210	254	102
17....	87	60	....	....	....	242	1730	1850	808	204	235	95
18....	79	71	....	....	....	233	1650	1780	732	210	240	100
19....	76	53	....	....	....	194	1540	1740	679	186	238	117
20....	100	44	....	....	....	191	1760	1900	611	178	350	106
21....	100	40	....	....	....	213	1710	1850	541	168	290	98
22....	91	40	....	....	....	216	1900	1730	496	233	250	104
23....	88	40	....	....	....	183	1940	1740	460	183	220	104
24....	88	40	....	....	....	153	1880	1690	438	144	200	90
25....	82	40	....	....	....	144	1930	1760	426	127	176	82
26....	80	40	....	....	....	127	1900	1680	413	138	158	80
27....	90	40	....	....	*45	115	1900	1680	386	183	144	88
28....	88	40	....	....	....	131	1880	1470	348	188	142	98
29....	90	40	....	....	....	131	1870	1480	344	210	178	93
30....	90	40	....	....	....	138	1610	1690	344	271	312	88
31....	77	....	....	....	....	158	....	1800	....	213	382	....
Total	3256	1630	....	....	....	4384	34551	53630	25147	6459	9975	4242
Mean.	105	54.3	36.0	34.0	40.0	141	1150	1730	838	208	322	141
Max..	186	77	....	....	....	242	1940	2470	1630	359	834	308
Min..	76	40	....	....	....	50	117	1160	344	127	142	80
Acre-ft.	6460	3230	2210	2090	2300	8700	68530	106400	49880	12310	19790	8410

Total run-off for water year 1935-36=290,810 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

GREEN RIVER BASIN

GREEN RIVER NEAR LINWOOD, UTAH

Location—Water stage recorder in SW $\frac{1}{4}$ Sec. 29, T. 3 N., R. 21 E., two miles south of Wyoming-Utah line, and five miles southeast of Linwood. Gage datum lowered 0.77 foot November 14, 1933.

Nearest Tributary—Henry's Fork enters one-fourth mile downstream.

Drainage Area—14,300 square miles. Zero of gage is 5,844.64 feet above mean sea level.

Records Available—October, 1928, to September 30, 1936.

Maximum discharge observed during period 1928-36; 15,200 second-feet June 4, 1936. Gage height, 10.11 feet.

Maximum Discharge—Year 1935; 12,600 second-feet June 17, 1935. Gage height, 9.11 feet.

Maximum Discharge—Year 1936; 15,200 second-feet June 4, 1936. Gage height, 10.11 feet.

Accuracy—Records considered good except for those estimated for period from November 28 to March 17, 1935, which are fair, and December 1 to March 8, 1936, computed on basis of two discharge measurements, gage heights and weather records, and those for April 15-18 and June 2-7, computed on basis of records for station at Green River, Wyoming.

Diversions for irrigation above station.

ELK RIVER AT CLARK, COLORADO

Location—Water stage recorder in Sec. 28, T. 9 N., R. 85 W., at Clark.

Drainage Area—206 square miles. Altitude—7,300 feet above mean sea level.

Records Available—May 1, 1910, to September 30, 1922; April 23, 1930, to September 30, 1936.

Maximum discharge observed during period 1910-22, 1930-36: 4,470 second-feet, June 6, 9, 1912.

Maximum Discharge—Year 1935; 3,360 second-feet June 13, 1935. Gage height, 5.00 feet.

Maximum Discharge—Year 1936; 2,990 second-feet May 5, 1936. Gage height, 4.65 feet.

Accuracy—Records considered good except those for April 1 to May 8, November 22-30, 1935, which are fair. No records December 1 to March 31, 1935, and from December 1 to April 20, 1936.

Practically no diversions above station.

LITTLE SNAKE RIVER NEAR LILY, COLORADO

Location—Water stage recorder in Sec. 20, T. 7 N., R. 98 W., six miles north of Lily and six miles above mouth, at highway bridge.

Drainage Area—3,730 square miles.

Records Available—June to August, 1904, May 1, 1922, to September 30, 1936.

Maximum discharge observed during period 1904, 1922-36: 14,200 second-feet May 27, 1926. Gage height, 10.5 feet.

Maximum Discharge—Year 1935; 3,780 second-feet May 29, 1935. Gage height, 6.80 feet.

Maximum Discharge—Year 1936; 6,590 second-feet August 3, 1936. Gage height, 5.92 feet.

Accuracy—Records considered excellent above 1,000 second-feet, good between 500 and 1,000 second-feet, and fair below 500 second-feet. Discharge estimated September 11 to 16, 1934, and November 1-12, 28-30, 1935. No record December 1 to March 31, 1935, and December 1 to March 11, 1936.

Diversions for irrigation above station.

SLATER FORK NEAR SLATER, COLORADO

Location—Water stage recorder in SW $\frac{1}{4}$ Sec. 21, T. 12 N., R. 89 W., one and one-half miles south of Slater and about one mile above mouth.

Drainage Area—161 square miles.

Records Available—May, 1910, to May, 1912, June, 1931, to September 30, 1936.

Maximum discharge observed during period 1910-12, 1931-36: 1,700 second-feet May 19, 1912.

Maximum Discharge—Year 1935; 926 second-feet May 26, 1935. Gage height, 7.27 feet.

Maximum Discharge—Year 1936; 689 second-feet May 6, 1936. Gage height, 6.64 feet.

Accuracy—Records considered good except for estimated periods from April 1-8, 23-28, May 5, December 21, 31, 1935, July 1-6, 1936. No records December 4 to March 31, 1935, January 1 to March 28, 1936.

Diversions for irrigation above station.

WHITE RIVER NEAR MEEKER, COLORADO

Location—Water stage recorder in Sec. 30, T. 1 N., R. 93 W., three and one-half miles east of Meeker, and one mile above mouth of Curtis Creek.

Drainage Area—762 square miles.

Records Available—May, 1901, to October, 1906, May, 1910, to November, 1913, to September 30, 1936. Station maintained two and one-half miles downstream prior to October, 1913.

Maximum daily discharge observed during period 1901-6, 1910-36: 6,070 second-feet June 16, 1921.

Maximum Discharge—Year 1935; 3,450 second-feet June 16, 1935. Gage height, 3.68 feet.

Maximum Discharge—Year 1936; 3,030 second-feet May 6, 1936. Gage height, 3.57 feet.

Accuracy—Records considered excellent except for estimated periods from April 5-6, May 9, 10, 1935, December 1, 1934, to February 15, 1935, January 1 to April 7 1936, computed on basis of discharge measurements, weather records and comparison of other station records and which are fair. July 31 to August 5, 1936, computed on basis of records for Roaring Fork at Glenwood Springs.

Diversions for irrigation above station.

WHITE RIVER NEAR WATSON, UTAH

Location—Water stage recorder in Sec. 2, T. 10 S., R. 24 E., Salt Lake Meridian, 10 miles northeast of Watson on highway to Vernal, Utah, and just below mouth of Evacuation Creek.

Drainage Area—4,020 square miles.

Records Available—April 1 to October 31, 1906; April 1, 1923, to September 30, 1936.

Maximum daily discharge observed during period 1906, 1923-36: 8,160 second-feet July 15, 1929.

Maximum Discharge—Year 1935; 3,370 second-feet September 8, 1935. Gage height, 4.08 feet.

Maximum Discharge—Year 1936; 3,980 second-feet August 11, 1936. Gage height, 4.50 feet.

Accuracy—Records considered fair 1935, and good for 1936. Estimates for periods from December 1 to January 14, January 20-28, February 25 to March 9, March 17, 1935, based on one discharge measurement and temperature records. Estimates for ice period December 5 to March 6, March 17-19, 1936, are fair and based on two discharge measurements and records for station near Meeker, Colorado.

Diversions for irrigation above station.

YAMPA RIVER AT STEAMBOAT SPRINGS, COLORADO

Location—Water stage recorder in Sec. 17, T. 6 N., R. 84 W., at First Street bridge in Steamboat Springs and a quarter of a mile above Soda Creek.

Drainage Area—604 square miles. Altitude—6,680 feet above mean sea level.

Records Available—May 3, 1904, to October 31, 1906; March 1, 1910, to September 30, 1936.

Maximum discharge observed during period 1904-6, 1910-36: 6,820 second-feet June 14, 1921. Gage height, 7.08 feet.

Maximum Discharge—Year 1935; 4,150 second-feet June 13, 1935. Gage height, 5.60 feet.

Maximum Discharge—Year 1936; 4,080 second-feet May 29, 1936. Gage height, 5.48 feet.

Accuracy—Records considered excellent except those estimated October 7-10, 29, 30, November 16, 26-29, 1934, April 24, 25, May 19, September 22, 23, October 25-28, November 6, 23-30, 1935, May 2, 6, June 2, July 2-5, 14, 15, 31, August 1, 2, which are fair. No record December 7 to March 24, 1935, and from December 1 to March 26, 1936.

Diversions for irrigation above station.

YAMPA RIVER NEAR MAYBELL, COLORADO

Location—Water stage recorder in Sec. 2, T. 6 N., R. 95 W., at highway bridge three miles east of Maybell.

Drainage Area—3,410 square miles. Altitude—5,900 feet above mean sea level.

Records Available—April 24, 1916, to September 30, 1936.

Maximum discharge observed during period 1916-36: 17,900 second-feet May 19, 1917. Gage height, 7.09 feet.

Maximum Discharge—Year 1935; 9,870 second-feet June 16, 1935. Gage height, 6.96 feet.

Maximum Discharge—Year 1936; 10,600 second-feet May 18, 1936. Gage height, 7.09 feet.

Accuracy—Records considered good except those for November 25-30, 1934, which are estimated, and for October 23-26, October 31 to November 16, November 29, 30, 1935, April 1-8, May 6-16, which were computed on basis of records for adjacent stations, which are fair. No records December 1 to March 25, 1935, and December 1 to March 12, 1936.

Diversions for irrigation above station.

Discharge of Green River Near Linwood, Utah, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	270	308	292	295	320	351	768	1390	4470	4440	1090	592
2....	281	324	292	295	327	363	800	1350	4280	4200	1090	549
3....	287	324	292	301	330	373	887	1260	3990	4160	1150	527
4....	287	317	290	304	337	373	869	1310	3600	4010	1240	516
5....	287	314	270	308	337	351	869	1290	3380	3820	1230	495
6....	278	311	284	311	341	369	869	1230	3170	3550	1160	475
7....	276	311	295	314	344	354	792	1130	3140	3380	1050	450
8....	281	311	292	320	338	399	730	1050	3590	3250	1040	450
9....	284	311	281	330	338	403	760	1020	4560	2990	986	455
10....	281	317	286	330	351	403	760	1110	5380	2730	914	465
11....	287	324	292	330	351	382	745	1130	6520	2520	878	450
12....	284	324	298	314	320	407	752	1080	8510	2250	826	441
13....	292	327	301	304	311	455	745	1080	9810	2140	800	426
14....	314	327	314	292	311	505	745	1170	10600	2070	792	412
15....	334	324	317	284	319	560	752	1330	11200	1920	752	399
16....	412	327	311	287	314	562	809	1290	11800	1780	738	382
17....	327	330	304	290	324	760	1000	1140	12400	1720	869	362
18....	330	330	308	292	327	995	1210	1030	12200	1830	843	348
19....	373	340	314	290	334	730	1400	1100	10500	1660	941	348
20....	365	340	329	278	344	784	1340	1410	9020	1650	826	351
21....	348	337	320	287	348	692	1210	1440	7370	1620	834	344
22....	330	348	320	292	354	670	1230	1680	6590	1580	809	337
23....	330	348	314	295	358	670	1390	1560	6520	1530	792	330
24....	324	324	304	298	362	648	1630	1460	6450	1480	800	327
25....	314	298	298	298	348	618	1760	1300	6370	1460	950	327
26....	304	287	317	301	334	700	1800	1410	6500	1430	1330	320
27....	298	232	320	308	337	618	1620	1690	6390	1360	1050	317
28....	298	251	320	311	340	566	1410	2140	5980	1310	860	324
29....	301	246	317	314	....	527	1270	3080	5350	1240	760	337
30....	304	258	304	314	....	678	1300	4410	4940	1170	685	337
31....	304	....	298	317	....	784	....	4750	....	1120	632	....
Total	9585	9370	9394	9404	9399	17050	32222	48820	204580	71370	28717	12193
Mean.	309	312	303	303	336	550	1074	1575	6819	2302	926	406
Max..	412	348	329	330	362	995	1800	4750	12400	4400	1330	592
Min..	270	232	270	278	311	351	730	1020	3140	1120	632	317
Ac.-ft.	19010	18590	18630	18650	18640	33820	63910	96830	405800	141600	56960	24180

Total run-off for water year 1934-35=916,600 acre-feet.

Discharge of Green River Near Linwood, Utah, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	335	392	288	277	252	636	698	5810	10300	4830	3320	910
2....	335	406	277	282	256	730	354	5840	11800	4410	2900	870
3....	339	358	275	282	264	750	636	5770	13000	3920	5420	1110
4....	339	366	275	288	277	800	730	5760	14700	3500	5940	1440
5....	324	314	272	275	305	845	714	5820	14200	3020	6020	1580
6....	328	308	295	260	324	890	568	6070	12500	2700	4880	1340
7....	328	350	298	249	331	910	574	6690	11200	2510	3890	1340
8....	324	358	298	232	331	944	658	7670	10100	2380	3260	1300
9....	321	476	298	230	347	920	1020	7160	9060	2270	2870	1280
10....	314	562	295	227	370	860	942	6450	8160	2170	2480	1260
11....	305	538	290	238	379	860	1220	5810	7790	2090	2340	1180
12....	308	520	295	242	388	784	1490	5710	7330	2200	2130	1060
13....	308	492	288	249	415	870	1920	6570	6960	3690	2270	1010
14....	311	388	272	256	425	860	2550	7620	6770	4440	2570	942
15....	314	324	277	256	425	840	2450	8650	6800	4140	2340	880
16....	324	301	252	252	425	811	2520	9760	7260	3810	2220	870
17....	331	354	242	249	435	730	2550	11000	7590	3230	2170	811
18....	335	406	238	235	445	766	2840	11900	8090	2940	2080	784
19....	335	526	238	237	455	748	3270	11700	8180	2820	1880	784
20....	335	520	242	252	465	714	3410	10900	7550	2610	1730	766
21....	339	538	245	260	476	802	3890	10000	7130	2380	1640	748
22....	347	487	249	268	487	840	4500	9570	6700	2220	1510	739
23....	362	397	252	268	498	910	4900	9420	6330	2200	1400	722
24....	374	402	264	272	509	730	5310	9010	6140	2080	1320	698
25....	374	374	272	256	520	706	5690	8560	5920	1880	1210	690
26....	379	430	277	249	532	698	5840	8270	5820	1830	1140	674
27....	379	374	277	245	556	674	5740	8340	5500	2050	1070	674
28....	388	350	282	249	594	636	5680	8680	5260	2470	997	666
29....	388	321	282	252	608	714	5600	9150	5200	2650	953	666
30....	410	314	280	245	....	802	5660	9710	5150	3830	910	650
31....	420	....	280	238	....	802	....	9960	....	3820	964	....
Total	10653	12246	8465	7870	12094	24582	83954	253300	248490	91090	75824	28444
Mean.	344	408	273	254	417	793	2798	8172	8283	2938	2446	948
Max..	420	562	298	288	608	944	5840	11900	14700	4830	6020	1580
Min..	305	301	238	227	252	636	354	5710	5150	1830	910	650
Ac.-ft.	21130	24290	16790	15610	23990	48760	166500	502500	492900	180700	150400	56420

Total run-off for water year 1935-36=1,700,000 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Elk River at Clark, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	39	.	.	.	.	41	272	1260	1160	211	72
2	46	43	.	.	.	.	40	254	1030	1110	190	62
3	46	46	.	.	.	.	55	208	953	1020	164	60
4	43	46	.	.	.	.	58	220	1130	928	150	56
5	42	50	.	.	.	.	64	230	1330	817	146	55
6	40	48	.	.	.	.	54	294	1580	762	136	78
7	39	40	.	.	.	.	25	314	1710	740	128	115
8	36	41	.	.	.	.	61	494	1990	697	126	115
9	34	39	.	.	.	.	67	596	2280	636	126	94
10	33	38	.	.	.	.	33	762	2290	596	115	68
11	33	36	.	.	.	.	27	770	2270	566	108	61
12	33	42	.	.	.	.	34	936	2210	500	102	55
13	33	46	.	.	.	.	55	885	2480	465	96	54
14	33	35	.	.	.	.	310	762	2730	440	90	50
15	34	36	.	.	.	.	148	655	2600	400	92	49
16	40	44	.	.	.	.	133	669	2230	366	100	44
17	40	31	.	.	.	.	175	842	1800	370	104	43
18	40	31	.	.	.	.	131	868	1800	344	106	43
19	39	37	.	.	.	.	220	725	1800	326	90	43
20	37	40	.	.	.	.	190	658	1790	344	80	42
21	38	42	.	.	.	.	450	725	1770	344	80	48
22	39	43	.	.	.	.	629	860	1700	339	76	40
23	39	43	.	.	.	.	310	1110	1730	298	75	42
24	33	43	.	.	.	.	205	1500	1620	272	96	60
25	33	44	.	.	.	.	205	2060	1320	254	87	64
26	33	43	.	.	.	.	112	1940	1130	240	76	55
27	33	43	.	.	.	.	161	1880	1230	217	72	58
28	33	50	.	.	.	.	211	1850	1280	214	68	55
29	33	*45	.	.	.	.	370	1660	1330	205	70	50
30	32	*45	.	.	.	.	440	1480	1260	234	67	49
31	34	.	.	.	.	.	1370	.	224	70	.	.
Total	1147	1249	.	.	.	.	5014	27849	51633	15428	3297	1780
Mean.	37	41.6	.	.	.	.	167	898	1721	498	106	59.3
Max..	46	50	.	.	.	.	629	2060	2730	1160	211	115
Min..	32	31	.	.	.	.	25	208	953	205	67	40
Acre-ft.	2280	2480	.	.	.	.	9950	55240	102400	30600	6540	3530

Total run-off for period = 213,020 acre-feet.

Discharge of Elk River at Clark, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	67	.	.	.	.	979	2100	512	143	78	
2	48	67	.	.	.	.	1220	1510	460	131	60	
3	49	67	.	.	.	.	1590	1270	430	178	60	
4	50	67	.	.	.	.	1930	1300	410	161	55	
5	50	64	.	.	.	.	2540	1300	400	136	54	
6	41	55	.	.	.	.	2180	1190	390	122	54	
7	38	43	.	.	.	.	1490	1150	348	131	50	
8	39	52	.	.	.	.	1080	1490	326	108	44	
9	39	64	.	.	.	.	1010	1540	326	100	42	
10	38	66	.	.	.	.	1490	1420	318	108	64	
11	38	66	.	.	.	.	1490	1460	542	106	80	
12	39	66	.	.	.	.	1920	1600	405	119	58	
13	39	66	.	.	.	.	1970	1580	335	100	50	
14	39	66	.	.	.	.	2180	1570	286	98	48	
15	40	61	.	.	.	.	2330	1600	264	94	44	
16	49	58	.	.	.	.	2600	1570	254	87	44	
17	52	58	.	.	.	.	2450	1440	254	76	43	
18	50	58	.	.	.	.	2330	1370	282	76	41	
19	55	78	.	.	.	.	2230	1330	230	75	41	
20	54	82	.	.	.	.	2230	1220	208	80	41	
21	52	82	.	.	.	.	1160	2140	1240	187	82	39
22	52	80	.	.	.	.	1360	1990	1080	158	76	38
23	54	80	.	.	.	.	885	1870	928	136	68	39
24	54	75	.	.	.	.	1060	1940	885	128	61	39
25	50	75	.	.	.	.	1520	2040	860	124	58	40
26	50	70	.	.	.	.	1800	2120	885	128	55	43
27	54	70	.	.	.	.	1980	2120	725	148	55	49
28	52	70	.	.	.	.	1690	2030	725	161	54	54
29	56	70	.	.	.	.	1520	1980	718	190	50	58
30	61	70	.	.	.	.	1580	2060	596	161	50	50
31	67	.	.	.	.	.	2160	.	150	58	.	.
Total	1497	2013	.	.	.	.	14555	59689	37652	8651	2896	1500
Mean.	48.3	67.1	.	.	.	.	Apr. 21	1930	1260	279	93.4	50
Max..	67	82	.	.	.	.	to 30	2600	2100	542	178	80
Min..	38	43	.	.	.	.		979	596	124	50	38
Acre-ft.	2970	3990	.	.	.	.	28870	118400	74680	17160	5740	2980

Total run-off for period = 254,790 acre-feet.

*Estimated.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of Little Snake River Near Lily, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1....	0	0	....	....	....	177	596	2000	445	3	26	
2....	0	0	....	....	....	195	672	1680	390	4	3	4
3....	0	0	....	....	....	212	572	1540	321	3	4	3
4....	0	0	....	....	....	212	500	1520	206	3	4	4
5....	0	0	....	....	....	230	456	1300	206	3	5	
6....	0	0	....	....	....	230	500	1440	202	3	6	
7....	0	0	....	....	....	248	620	1720	144	3	174	
8....	0	0	....	....	....	244	692	2000	110	3	795	
9....	0	0	....	....	....	212	633	2130	128	3	265	
10....	0	0	....	....	....	230	835	2470	61	2	135	
11....	0	0	....	....	....	237	1310	2540	118	2	70	
12....	0	0	....	....	....	234	1730	2830	98	2	40	
13....	0	0	....	....	....	209	2240	2680	88	2	28	
14....	0	0	....	....	....	212	1790	2720	78	2	16	
15....	0	0	....	....	....	281	1520	2240	67	72	10	
16....	0	0	....	....	....	390	1390	2180	61	40	6	
17....	0	0	....	....	....	462	1440	2060	50	202	4	
18....	0	0	....	....	....	572	1600	1940	54	220	5	
19....	0	0	....	....	....	467	1570	1830	50	112	5	
20....	0	0	....	....	....	390	1350	1500	61	62	4	
21....	0	0	....	....	....	472	1130	1610	28	39	4	
22....	0	0	....	....	....	741	1190	1560	10	16	4	
23....	0	0	....	....	....	1030	1470	1100	16	17	4	
24....	0	0	....	....	....	755	1710	713	21	16	6	
25....	0	0	....	....	....	192	685	2160	620	9	9	4
26....	0	0	....	....	....	183	652	2720	560	4	5	3
27....	0	0	....	....	....	171	572	3050	620	4	4	3
28....	0	0	....	....	....	183	548	3050	590	3	3	3
29....	0	0	....	....	....	168	602	2900	472	3	3	3
30....	0	0	....	....	....	156	2240	....	3	3		
31....	0	0	....	....	....	1053	11896	44370	49975	3533	864	1643
Total	0	0	....	....	....	Mar. 26	397	1431	1666	114	27.9	54.8
Mean.	0	0	....	....	....	to 31	1030	3050	2830	494	220	795
Max..	0	0	....	....	....		177	456	472	3	2	3
Acre-ft	0	0		2090	23600	88010	99120	7010	1710	3260

Total run-off for period = 224,800 acre-feet.

Discharge of Little Snake River Near Lily, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	3	10	....	....	....	200	2950	2120	226	118	6.6	
2....	3	15	....	....	....	185	2360	2180	191	1110	5.8	
3....	3	15	....	....	....	131	2040	2180	176	2450	5.2	
4....	2.4	20	....	....	....	125	2070	1760	128	1160	6.2	
5....	2.6	25	....	....	....	120	2950	1400	94	550	3.4	
6....	2.4	30	....	....	....	115	3490	1370	74	385	2.4	
7....	1.8	30	....	....	....	140	4030	1680	62	371	2.0	
8....	1.8	30	....	....	....	140	3410	1530	50	304	1.6	
9....	1.4	30	....	....	....	262	2400	1260	44	262	1.2	
10....	1.2	30	....	....	....	278	2040	1200	42	229	1.4	
11....	1.0	30	....	....	....	206	1870	1160	42	58	8.8	
12....	1.0	34	....	....	....	425	218	2360	1040	70	39	7.6
13....	1.0	34	....	....	....	299	290	2950	950	112	30	6.2
14....	1.0	22	....	....	....	206	454	3150	923	32	21	5.0
15....	1.0	40	....	....	....	218	655	3330	887	82	16	4.0
16....	1.0	55	....	....	....	212	869	3600	833	105	17	3.0
17....	1.0	90	....	....	....	170	1200	3870	788	74	19	2.4
18....	1.0	100	....	....	....	140	1440	3990	738	34	14	1.6
19....	0.9	90	....	....	....	143	1680	3740	648	14	13	0.8
20....	1.0	90	....	....	....	140	1780	3250	550	9.8	12	0.2
21....	1.2	100	....	....	....	152	1930	3200	502	9.0	12	0
22....	1.2	90	....	....	....	140	2080	3190	472	7.8	15	0
23....	1.4	90	....	....	....	164	2390	2980	436	7.0	31	0
24....	1.4	110	....	....	....	206	2720	2590	385	6.4	15	0
25....	2.2	90	....	....	....	158	2710	2340	335	6.0	12	0
26....	3.0	100	....	....	....	143	2850	2240	294	6.2	30	0
27....	3.0	90	....	....	....	152	3010	2250	262	6.6	16	0.2
28....	3.0	90	....	....	....	155	3090	2280	243	6.2	10	0.2
29....	3.0	90	....	....	....	143	2750	2340	308	31	8.8	0.2
30....	3.0	90	....	....	....	122	2900	2220	294	50	7.8	0.2
31....	9.0	....	....	....	....	164	2070	....	212	7.0		
Total	63.9	1760	....	....	....	3652	36978	87550	28728	2010	7342.6	76.2
Mean.	2.06	58.7	....	....	....	Mar. 12	1230	2820	958	64.8	237	2.54
Max..	9.0	110	....	....	....	to 31	3090	4030	2180	226	2450	8.8
Min..	0.9	10	....	....	....		115	1870	243	6.0	7.0	0
Acre-ft	127	3490	....	....	....	7240	73340	173700	56980	3990	14560	151

Total run-off for period = 333,578 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

TWENTY-EIGHTH BIENNIAL REPORT

Discharge of Slater Fork Near Slater, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	15	14	...	...	...	14	91	404	98	8	6
2	12	15	13	...	...	...	16	76	320	85	8	6
3	8	14	13	...	...	...	18	68	286	77	8	6
4	10	14	...	...	...	...	18	63	329	69	6	6
5	12	13	...	...	...	...	18	80	406	59	6	6
6	14	14	...	...	...	...	20	96	485	47	5	5
7	14	14	...	...	...	...	20	114	493	42	5	5
8	12	14	...	...	...	...	24	117	520	36	5	8
9	14	13	...	...	...	...	27	178	600	31	5	8
10	16	13	...	...	...	...	23	297	605	27	4	4
11	11	13	...	...	...	...	20	392	581	24	5	6
12	11	13	...	...	...	...	23	441	570	21	5	5
13	9	12	...	...	...	...	32	419	629	16	5	4
14	11	13	...	...	...	...	44	423	610	15	5	4
15	13	12	...	...	...	...	50	369	641	16	4	4
16	15	13	...	...	...	...	86	350	465	14	8	4
17	18	13	...	...	...	...	69	364	430	14	10	4
18	18	14	...	...	...	...	48	390	333	15	8	4
19	21	14	...	...	...	...	56	318	299	14	8	4
20	21	14	...	...	...	...	86	273	299	13	6	4
21	18	14	...	...	...	...	108	326	282	12	6	3
22	18	12	...	...	...	...	129	416	216	12	5	4
23	15	14	...	...	...	...	130	467	255	12	5	4
24	15	14	...	...	...	...	125	610	244	11	7	4
25	18	12	...	...	...	...	120	749	206	9	8	6
26	18	14	...	...	...	...	110	672	154	8	7	6
27	16	11	...	...	...	...	100	602	137	6	6	7
28	17	13	...	...	...	...	75	629	142	6	6	7
29	18	11	...	...	...	...	70	537	133	6	6	7
30	17	13	...	...	...	...	124	509	118	7	6	7
31	16	...	...	...	...	...	485	...	8	6	...	...
Total	456	398	...	...	...	...	1813	10921	11192	830	192	161
Mean.	14.7	13.3	...	...	...	...	60.4	352	373	26.8	6.19	5.37
Max..	21	15	...	...	...	...	139	749	641	98	10	8
Min...	8	11	...	...	...	...	...	63	118	6	4	3
Acre-ft.	904	789	...	...	...	...	3600	21660	22200	1650	381	319

Total run-off for period = 51,503 acre-feet.

Discharge of Slater Fork Near Slater, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.1	12	9	...	...	...	13	181	343	15	5.1	2.7
2	7.1	13	9	...	...	...	9.2	166	223	12	5.3	4.4
3	7.2	13	9.8	...	...	...	13	316	162	.9	11	4.0
4	7.5	11	11	...	...	...	12	496	143	8.1	7.1	4.2
5	7.5	8.9	11	...	...	...	14	555	147	8.2	5.4	4.2
6	7.3	14	13	...	...	...	12	557	153	7.8	3.4	4.0
7	7.2	12	14	...	...	...	13	260	138	7.4	1.1	4.2
8	7.2	10	13	...	...	...	16	184	138	6.2	1.3	4.2
9	7.7	11	13	...	...	...	16	194	137	6.5	1.8	3.7
10	7.9	9.6	10	...	...	...	17	218	112	6.8	1.4	3.8
11	8.0	5.9	13	...	...	...	23	337	97	13	1.0	5.0
12	8.5	10	13	...	...	...	34	373	93	23	1.0	5.3
13	8.0	14	13	...	...	...	48	384	88	16	0.5	4.9
14	7.7	11	14	...	...	...	62	400	81	12	0.5	4.6
15	8.0	10	12	...	...	...	80	445	74	8.9	0.2	4.4
16	8.2	12	9.8	...	...	...	101	460	73	8.0	0.4	5.0
17	8.5	13	11	...	...	...	130	425	62	18	0.3	6.0
18	8.8	13	11	...	...	...	148	339	50	12	0	6.3
19	9.2	12	12	...	...	...	181	337	42	8	0.9	6.2
20	9.4	9	11	...	...	...	195	346	36	6.2	1.4	6.2
21	10	10	11	...	...	...	208	333	32	5.5	2.0	5.9
22	8.4	7.7	11	...	...	...	230	276	27	5.4	2.3	6.1
23	7.5	12	10	...	...	...	247	249	24	4.4	1.2	6.0
24	8.4	9.4	10	...	...	...	262	230	22	4.6	0.6	6.0
25	12	13	10	...	...	...	306	239	26	3.2	0	5.9
26	12	13	10	...	...	...	316	249	85	3.3	0	6.9
27	10	12	10	...	...	...	314	278	33	3.2	0	8.3
28	11	8.4	10	...	...	...	280	289	23	2.9	1.4	8.5
29	12	8.0	10	...	...	...	14	341	265	23	5.8	1.8
30	9.2	10	10	...	...	...	14	255	274	22	7.7	1.7
31	9.2	...	10	...	...	...	14	293	...	6.1	2.7	...
Total	268.1	327.9	344.6	...	...	...	3896.2	9948	2709	264.2	62.8	164.0
Mean.	8.65	10.9	11.1	...	...	...	130	321	90.3	8.52	2.03	5.47
Max..	12	14	14	...	...	...	341	557	343	23	11	8.6
Min...	7.1	5.9	9	...	...	...	9.2	166	22	2.9	0	2.7
Acre-ft.	532	650	684	...	...	...	7730	19730	5370	524	125	325

Total run-off for period = 35,670 acre-feet.

Unless otherwise noted, discharges are in cubic feet per second.

Discharge of White River Near Meeker, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	282	273	....	240	260	268	422	1460	1330	304	327	
2....	277	282	....	240	269	273	388	1290	1220	293	299	
3....	277	277	....	240	269	310	375	1300	1120	288	282	
4....	258	293	....	240	236	316	369	1420	1020	288	293	
5....	254	288	....	*271	240	269	310	1560	928	282	293	
6....	254	293	....	245	190	295	429	1780	864	277	304	
7....	249	299	....	245	182	277	443	1800	776	277	327	
8....	254	288	....	245	260	321	429	1950	716	282	369	
9....	258	282	....	245	205	369	534	1960	657	277	350	
10....	268	288	....	245	236	332	649	2130	632	273	321	
11....	268	288	....	230	197	332	708	2290	607	258	304	
12....	268	282	....	230	260	310	750	2520	566	244	288	
13....	273	282	....	230	260	321	785	2580	575	240	288	
14....	268	288	....	230	269	332	802	2850	527	244	277	
15....	282	282	....	230	304	369	699	3010	480	240	268	
16....	288	273	....	197	260	422	733	3080	429	273	268	
17....	282	277	....	182	244	414	802	2760	407	293	263	
18....	277	277	....	244	260	350	890	2460	400	282	254	
19....	277	273	....	244	278	338	828	2440	400	263	249	
20....	293	273	....	244	278	375	742	2400	429	268	249	
21....	277	282	....	244	286	429	750	2630	414	249	254	
22....	273	263	....	244	286	450	890	2560	400	235	258	
23....	277	268	....	236	260	443	1000	2460	394	249	263	
24....	282	282	....	269	295	429	1210	2540	422	268	273	
25....	277	268	....	236	269	375	1440	2310	344	321	310	
26....	268	268	....	182	286	350	1560	1900	310	321	310	
27....	273	244	....	182	278	388	1700	1790	304	304	338	
28....	277	240	....	212	244	394	1670	1760	288	293	316	
29....	273	223	....	....	288	381	1520	1690	277	288	310	
30....	277	231	....	....	304	414	1530	1480	277	288	288	
31....	277	....	....	....	304	....	1500	....	288	321	....
Total	8438	8227	....	6491	8086	10687	26910	64160	17801	8583	8793	
Mean.	272	274	270	250	232	261	356	868	2139	574	277	293
Max..	293	299	....	....	269	304	450	1700	3080	1330	321	369
Min..	249	223	....	....	182	182	268	363	1290	277	235	249
Ac.-ft.	16740	16320	16600	15370	12870	16040	21200	53380	127300	35310	17020	17440

Total run-off for water year 1934-1935=365,600 acre-feet.

Discharge of White River Near Meeker, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	282	304	273	273	300	280	265	948	2640	690	520	455
2....	273	327	258	265	300	280	260	974	2250	634	500	391
3....	268	338	254	280	290	275	250	1240	1770	582	480	364
4....	263	338	263	275	260	280	265	1580	1610	540	460	344
5....	263	304	299	295	275	285	265	2020	1500	526	450	334
6....	249	338	288	290	295	285	260	2140	1320	486	430	324
7....	235	332	288	285	310	290	265	1510	1210	461	413	315
8....	235	321	277	290	295	295	265	1180	1360	449	391	301
9....	235	321	282	300	295	280	256	1030	1600	449	396	292
10....	240	316	263	330	310	285	260	1060	1630	499	391	296
11....	231	275	288	315	315	275	287	1260	1670	642	385	324
12....	235	288	273	315	310	280	324	1560	1740	612	402	301
13....	240	327	293	300	300	285	380	1580	1940	567	374	292
14....	244	316	277	320	295	285	519	1700	2040	492	364	283
15....	244	299	223	315	290	289	582	2080	1960	492	344	278
16....	268	293	200	312	285	290	642	2360	2060	512	334	274
17....	263	310	193	310	285	295	771	2290	1890	506	339	269
18....	258	304	227	295	288	300	838	2220	1630	492	324	265
19....	263	310	219	275	285	295	863	2200	1540	449	329	260
20....	273	299	212	295	285	290	897	2420	1430	436	334	252
21....	273	293	223	340	280	295	897	2470	1320	424	359	278
22....	244	275	227	320	285	300	1030	2220	1210	413	354	292
23....	254	304	235	325	290	285	1100	2080	1200	391	329	283
24....	268	293	282	330	280	290	1020	2060	1070	380	315	283
25....	282	304	263	335	275	295	1040	2250	1020	385	310	274
26....	304	299	268	320	280	280	1130	2290	956	408	310	292
27....	299	304	268	300	280	275	1220	2380	863	436	306	301
28....	293	310	288	305	280	265	1100	2400	804	492	306	301
29....	304	273	273	310	280	255	1150	2360	788	480	306	301
30....	310	263	268	270	....	260	1060	2580	763	449	319	310
31....	282	....	273	275	....	265	....	2640	....	430	369	....
Total	8175	9178	8018	9365	8398	8774	19461	59082	44784	15204	11543	9129
Mean.	264	306	259	302	290	283	649	1906	1493	490	372	304
Max..	310	338	299	340	315	300	1220	2640	690	520	455	
Min..	231	263	193	265	260	255	250	948	763	380	306	252
Ac.-ft.	16210	18200	15900	18580	16660	17400	38600	117200	88830	30160	22900	18110

Total run-off for water year 1935-1936=418,800 acre-feet.

*Discharge measurement.

Discharge of White River Near Watson, Utah, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	323	264	....	350	386	370	328	509	1880	1250	352	260
2....	314	264	....	250	360	370	319	542	1710	1130	273	273
3....	304	264	....	190	355	370	305	535	1500	1020	291	278
4....	295	282	....	150	346	370	323	476	1360	938	260	260
5....	286	278	....	220	337	370	342	458	1400	856	269	248
6....	282	291	....	270	342	350	346	447	1500	800	256	248
7....	278	286	....	270	310	350	337	464	1720	696	260	664
8....	282	300	....	270	342	350	332	516	1840	624	273	1290
9....	282	295	....	270	402	350	342	516	1970	572	295	472
10....	278	291	....	270	447	337	424	542	2000	524	273	401
11....	273	286	....	340	435	319	386	682	2140	498	260	379
12....	286	295	....	340	396	342	346	800	2220	485	236	374
13....	278	295	....	340	370	386	319	868	2330	460	216	357
14....	278	291	....	340	351	658	319	954	2420	436	228	342
15....	273	295	....	391	323	766	323	990	2650	418	282	328
16....	286	300	....	435	337	732	342	902	2880	395	593	318
17....	282	295	....	464	332	550	391	902	3190	379	479	309
18....	286	295	....	429	319	342	429	981	2930	379	454	304
19....	286	300	....	370	351	351	402	1140	2390	466	286	300
20....	291	323	....	310	402	376	370	1200	2250	558	278	295
21....	295	304	....	350	516	370	376	1060	2220	454	273	286
22....	282	295	....	350	674	328	407	999	2400	368	278	286
23....	273	300	....	350	522	332	464	1080	2400	352	269	291
24....	273	291	....	350	458	332	522	1210	2300	328	273	300
25....	273	300	....	350	330	319	550	1420	2330	318	333	323
26....	269	300	....	405	200	323	516	1680	2160	304	264	328
27....	269	273	....	410	220	328	490	1930	1770	278	304	390
28....	264	264	....	420	260	337	470	2020	1620	240	347	363
29....	260	240	....	424	....	319	458	2230	1520	224	269	368
30....	260	244	....	435	....	310	470	1940	1400	286	252	363
31....	264	....	407	....	323	....	1840	....	260	....	218	....
Total	8725	8601	....	10520	10423	12030	11748	31333	62400	16296	9229	10998
Mean.	281	287	....	325	339	372	388	392	1027	2080	526	367
Max..	323	323	....	....	464	674	766	550	2230	3190	1250	593
Min..	260	240	....	150	200	310	319	447	1360	224	216	248
Ac.-ft.	17310	17060	19980	20870	20670	23860	23300	63140	123800	32320	18310	21810

Total run-off for water year 1934-1935=402,400 acre-feet.

Discharge of White River Near Watson, Utah, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	352	374	342	345	365	380	351	1310	2700	744	656	511
2....	338	363	347	340	380	410	355	1200	2750	672	1380	479
3....	328	374	363	345	380	430	342	1140	2490	672	974	384
4....	318	401	374	355	355	460	342	1240	2080	720	680	363
5....	314	412	370	350	335	470	346	1620	1850	760	460	347
6....	314	384	380	360	350	470	355	1930	1740	784	448	347
7....	309	374	365	355	370	435	346	2410	1610	824	472	347
8....	309	390	360	350	380	476	328	1890	1450	648	466	342
9....	300	390	350	360	370	402	346	1550	1340	551	460	333
10....	291	390	355	370	370	407	381	1350	1430	704	442	448
11....	295	379	335	390	385	490	376	1240	1520	608	728	992
12....	300	347	355	375	390	396	370	1400	1550	664	472	648
13....	300	363	350	360	380	365	402	1690	1580	776	401	406
14....	295	395	365	355	375	391	453	1860	1670	640	401	318
15....	300	379	350	375	370	391	496	1840	1780	558	338	309
16....	309	395	300	370	360	370	550	2060	1740	504	342	309
17....	309	363	250	360	360	365	588	2250	1850	517	342	309
18....	328	363	260	350	365	365	650	2400	1760	530	342	309
19....	323	368	280	330	363	370	758	2330	1550	492	347	300
20....	323	368	270	350	360	365	800	2250	1420	485	330	304
21....	323	368	265	370	360	346	868	2390	1340	498	485	300
22....	328	363	280	390	365	351	852	2460	1280	448	424	304
23....	328	357	290	380	365	370	954	2320	1190	442	368	300
24....	323	357	300	390	360	370	1120	2190	1140	406	352	300
25....	328	368	340	400	350	355	1120	2160	1070	504	357	286
26....	352	368	330	390	360	346	1100	2300	992	448	368	278
27....	374	374	330	380	370	342	1220	2370	920	401	357	282
28....	384	368	340	360	380	337	1360	2470	848	517	333	328
29....	368	368	360	370	390	328	1230	2540	816	517	323	338
30....	368	363	350	360	....	332	1360	2470	744	947	479	338
31....	368	340	350	350	332	....	2620	....	680	472	1159	1159
Total	10099	11226	10246	11285	10663	12017	20119	61250	46200	18661	14559	1159
Mean.	326	374	331	364	368	388	671	1976	1540	602	479	372
Max..	384	412	380	400	390	490	1360	2620	2750	947	1380	992
Min..	291	347	250	330	335	328	1140	744	401	323	278	278
Ac.-ft.	20030	22270	20320	22380	21150	23840	39910	121500	91640	37010	29470	22130

Total run-off for water year 1935-1936=471,600 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Yampa River at Steamboat Springs, Colorado, for Year Ending Sept. 30, 1935													
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1....	49	52	79	....	....	....	209	483	1700	571	218	79
2....	47	65	67	....	....	....	224	424	1410	488	194	90
3....	43	57	60	....	....	....	319	374	1260	453	151	77
4....	44	60	67	....	....	....	253	347	1390	410	134	70
5....	46	85	70	....	....	....	224	374	1750	347	146	70
6....	46	85	67	....	....	....	224	428	2200	304	139	77
7....	46	85	....	....	....	....	197	438	2520	289	125	103
8....	45	86	....	....	....	....	203	434	2740	285	118	116
9....	43	83	....	....	....	....	221	448	2810	256	123	118
10....	42	79	....	....	....	....	188	526	3080	256	107	107
11....	41	77	....	....	....	....	172	565	3380	253	94	92
12....	41	74	....	....	....	....	191	623	3390	224	85	81
13....	49	72	....	....	....	....	267	721	3340	200	81	75
14....	44	70	....	....	....	....	323	721	3490	177	77	70
15....	49	70	....	....	....	....	369	670	3450	169	72	67
16....	52	70	....	....	....	....	453	670	2860	148	77	67
17....	52	70	....	....	....	....	374	735	2520	132	96	67
18....	49	72	....	....	....	....	334	791	2280	134	111	62
19....	52	77	....	....	....	....	392	700	2080	134	100	58
20....	57	63	....	....	....	....	401	605	2140	172	92	52
21....	54	74	....	....	....	....	448	599	1860	166	85	46
22....	57	68	....	....	....	....	504	756	1680	194	81	40
23....	60	65	....	....	....	....	483	1030	1600	200	77	33
24....	54	81	....	....	....	....	450	1320	1260	180	88	36
25....	57	77	....	....	....	....	166	400	1560	1130	164	92
26....	55	77	....	....	....	....	166	378	1940	980	148	88
27....	55	77	....	....	....	....	169	434	2110	924	130	83
28....	52	77	....	....	....	....	161	462	1890	861	109	77
29....	52	77	....	....	....	....	164	443	1740	756	100	75
30....	52	77	....	....	....	....	206	467	1770	670	103	70
31....	52	....	....	....	....	....	218	1940	....	218	68	
Total	1537	2202	410	....	....	....	1250	10007	27742	61511	7114	3224
Mean.	49.6	73.4	Dec. 1	Mar. 25	334	895	2050	229	104	74.3
Max..	60	86	to 6	to 31	504	2110	3490	571	218	118
Min..	41	52	....	....	....	....	172	347	670	100	68	33
Acre-ft.	3050	4370	813	2480	19850	55030	122000	14110	6390	4420

Total run-off for period = 232,513 acre-feet.

Discharge of Yampa River at Steamboat Springs, Colorado, for Year Ending Sept. 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	85	96	....	....	....	....	139	1400	3200	419	200	120
2....	75	120	....	....	....	....	136	1450	2650	400	200	111
3....	75	127	....	....	....	....	130	1500	2100	350	228	105
4....	75	123	....	....	....	....	125	1780	2090	300	264	100
5....	79	98	....	....	....	....	136	2120	1870	270	200	96
6....	77	110	....	....	....	....	136	2480	1570	238	183	90
7....	75	136	....	....	....	....	132	1980	1660	194	186	88
8....	75	141	....	....	....	....	144	1540	2000	177	172	86
9....	70	141	....	....	....	....	158	1260	1960	164	156	83
10....	67	134	....	....	....	....	180	1200	1810	188	154	81
11....	68	116	....	....	....	....	242	1400	1860	419	156	114
12....	67	111	....	....	....	....	347	1810	1850	576	151	118
13....	72	141	....	....	....	....	526	2220	1710	448	164	107
14....	75	136	....	....	....	....	770	2380	1660	400	151	98
15....	75	109	....	....	....	....	1080	2690	1680	300	144	85
16....	75	85	....	....	....	....	1430	3100	1650	221	136	85
17....	79	103	....	....	....	....	1660	3490	1380	203	134	85
18....	77	114	....	....	....	....	1870	3410	1250	256	134	83
19....	79	107	....	....	....	....	2040	3320	1080	221	127	83
20....	83	96	....	....	....	....	2240	3560	959	177	130	85
21....	94	92	....	....	....	....	2430	3660	966	161	134	79
22....	92	85	....	....	....	....	2610	3410	980	154	132	77
23....	85	85	....	....	....	....	2470	3220	819	141	118	75
24....	90	85	....	....	....	....	2260	3290	652	134	114	70
25....	90	85	....	....	....	....	2090	3450	623	127	98	67
26....	90	85	....	....	....	....	2010	3520	543	130	85	67
27....	95	85	....	....	....	....	132	1980	3520	488	151	81
28....	100	85	....	....	....	....	125	1750	3550	472	158	86
29....	120	85	....	....	....	....	125	1730	3550	582	166	92
30....	120	85	....	....	....	....	134	1590	3490	526	194	75
31....	107	....	....	....	....	....	139	1380	3480	194	88	
Total	2586	3201	....	....	....	....	655	34541	82230	42640	7631	4451
Mean.	83.4	107	....	....	....	....	Mar. 27	1150	2650	1420	246	144
Max..	120	141	....	....	....	....	to 31	2610	3660	3200	576	264
Min..	67	85	....	....	....	....	125	1200	472	127	75	67
Acre-ft.	5130	6350	....	....	....	....	1300	68510	163100	84580	15140	8830

Total run-off for period = 358,270 acre-feet.

Discharge of Yampa River Near Maybell, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69	143	.	.	.	.	796	2000	6680	3100	425	132
2	77	139	.	.	.	.	787	1940	6050	2800	524	132
3	83	147	.	.	.	.	760	1730	5340	2560	516	118
4	91	155	.	.	.	.	859	1560	4660	2390	501	111
5	101	166	.	.	.	.	1060	1420	4900	2180	459	104
6	97	175	.	.	.	.	970	1420	5530	1960	405	101
7	97	180	.	.	.	.	832	1740	6410	1730	379	151
8	91	198	.	.	.	.	778	1870	6930	1600	372	288
9	88	207	.	.	.	.	707	1850	7520	1550	360	207
10	88	212	.	.	.	.	823	2260	7960	1420	337	217
11	94	217	.	.	.	.	850	2860	8470	1270	320	242
12	94	207	.	.	.	.	707	3320	8860	1220	304	227
13	101	212	.	.	.	.	622	3610	9000	1150	283	194
14	111	207	.	.	.	.	647	4090	8930	1020	267	166
15	118	202	.	.	.	.	960	4100	9250	922	242	143
16	114	198	.	.	.	.	1050	3490	9430	850	392	128
17	111	194	.	.	.	.	1460	3440	9160	778	278	114
18	114	194	.	.	.	.	1580	3780	7280	698	237	111
19	132	198	.	.	.	.	1300	4220	6240	690	217	104
20	139	217	.	.	.	.	1300	3760	5880	716	207	101
21	151	232	.	.	.	.	1410	3280	5340	613	207	101
22	151	232	.	.	.	.	1720	3150	6090	647	198	97
23	162	207	.	.	.	.	2040	3700	5440	613	184	91
24	166	217	.	.	.	.	2010	4350	5320	655	171	94
25	162	200	.	.	.	.	1740	5700	5100	622	151	94
26	166	200	.	.	.	.	452	1480	7390	4390	540	143
27	158	200	.	.	.	.	516	1320	8100	3420	487	143
28	162	200	.	.	.	.	532	1370	8210	3370	438	155
29	162	200	.	.	.	.	622	1560	8010	3320	405	147
30	158	200	.	.	.	.	622	1700	7450	3300	392	136
31	158	.	.	.	.	.	769	...	6660	...	372	128
Total	3766	5856	.	.	.	.	3513	35198	120460	190070	36388	87883
Mean.	121	195	.	.	.	.	Mar. 26	1173	3886	6336	1174	283
Max..	166	232	.	.	.	.	to 31	2040	8210	9430	3100	524
Min..	69	139	.	.	.	.	.	622	1420	3300	372	128
Acre-ft.	7470	11620	.	.	.	.	6970	69810	238900	377000	72170	17430
												8250

Total run-off for period=809,620 acre-feet.

Discharge of Yampa River Near Maybell, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	163	200	.	.	.	.	520	7080	8220	1710	773	135
2	166	200	.	.	.	.	520	6060	8280	1490	581	138
3	163	220	.	.	.	.	510	5560	6720	1310	560	149
4	160	220	.	.	.	.	500	6890	5190	1140	504	149
5	152	220	.	.	.	.	510	6680	4760	1020	490	146
6	149	200	.	.	.	.	520	7000	4800	940	525	146
7	149	210	.	.	.	.	520	7500	4170	890	511	138
8	149	220	.	.	.	.	530	6600	3830	818	455	129
9	149	250	.	.	.	.	567	6500	4560	728	441	123
10	142	250	.	.	.	.	616	6100	5140	638	420	120
11	142	250	.	.	.	.	737	6000	4800	630	396	142
12	138	220	.	.	.	.	1080	6200	4620	616	384	149
13	138	220	.	.	.	.	497	1560	6700	4860	930	372
14	135	250	.	.	.	.	476	2080	7000	4980	1080	360
15	138	250	.	.	.	.	448	2740	7100	4700	940	349
16	142	250	.	.	.	.	427	3510	7500	4780	782	332
17	146	270	.	.	.	.	448	4360	9720	4900	678	316
18	146	255	.	.	.	.	455	5650	10480	4420	616	300
19	152	246	.	.	.	.	441	6600	9640	3900	553	285
20	156	265	.	.	.	.	427	7160	9140	3700	539	300
21	166	270	.	.	.	.	408	7800	9170	3320	525	295
22	174	237	.	.	.	.	490	8420	9200	3170	483	255
23	175	219	.	.	.	.	560	9220	8750	3220	434	242
24	165	198	.	.	.	.	525	9590	7850	2800	396	232
25	165	228	.	.	.	.	497	8880	7710	2480	372	219
26	200	250	.	.	.	.	504	8960	7850	2280	354	202
27	228	250	.	.	.	.	462	9400	8050	2110	327	190
28	242	232	.	.	.	.	396	9200	8300	1920	338	170
29	246	230	.	.	.	.	441	8050	8150	1760	338	163
30	250	230	.	.	.	.	490	8250	7950	1740	490	152
31	250	.	.	.	.	.	553	8200	8200	518	142	135
Total	5236	7010	.	.	.	.	8945	128560	236630	126130	22623	10916
Mean.	169	234	.	.	.	.	Mar. 13	4290	7630	4200	730	352
Max..	250	270	.	.	.	.	to 31	9590	10480	8280	1710	773
Min..	135	198	.	.	.	.	.	500	5560	1740	327	120
Ac.-ft.	10390	13900	.	.	.	.	17740	255000	469300	250200	44870	21650
												8110

Total run-off for period=1,091,160 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

SAN JUAN RIVER BASIN

SAN JUAN RIVER NEAR PAGOSA SPRINGS, COLORADO

Location—Water stage recorder in SE $\frac{1}{4}$ Sec. 12, T. 36 N., R. 1 W., at bridge one-third mile above mouth of West Fork of San Juan River and 9.5 miles northeast of Pagosa Springs.

Drainage Area—86.9 square miles.

Records Available—May, 1935, to September 30, 1936.

Maximum discharge observed during period 1935-36: 1,480 second-feet June 9, 1935.

Maximum Discharge—Year 1935; 1,480 second-feet June 9, 1935. Maximum stage, 3.99 feet June 20, 1935.

Maximum Discharge—Year 1936; 931 second-feet May 5, 1936. Gage height, 3.31 feet.

Accuracy—Records considered good except those estimated May 1-5, 7, 1935, and those for period ice effect November 9, 10, December 5-9, 11-13, December 15, 1935, to March 19, March 21 to April 5, 1936, which were computed on basis of four discharge measurements; records for station at Pagosa Springs, and weather reports, these are poor.

Diversions for irrigation above station.

SAN JUAN RIVER AT PAGOSA SPRINGS, COLORADO

Location—Water stage recorder in S $\frac{1}{2}$ Sec. 13, T. 35 N., R. 2 W., under lower highway bridge at Pagosa Springs. Prior to 1935 record was based on daily staff gage readings. Records are comparable.

Drainage Area—298 square miles.

Records Available—January, 1911, to November, 1914, May, 1935, to September 30, 1936.

Maximum discharge observed during period 1911-14, 1935-36: 4,710 second-feet June 15, 1935. Gage height, 6.72 feet.

Maximum Discharge—Year 1935; 4,710 second-feet June 15, 1935. Gage height, 6.72 feet.

Maximum Discharge—Year 1936; 2,400 second-feet May 5, 1936. Gage height, 5.84 feet.

Accuracy—Records considered fair except for those estimated May 14-20, 1935, which are poor, and those interpolated November 5, 1935, January 25, 26, 1936.

Diversions for irrigation above station.

SAN JUAN RIVER AT ROSA, NEW MEXICO

Location—Water stage recorder in Sec. 21, T. 32 N., R. 5 N., at Rosa, about 300 yards above highway bridge and one-fourth mile below mouth of Piedra River. From 1895 to 1899 and August 21, 1910, to September 30, 1920, a station was maintained at Arboles. For this period the San Juan River at Arboles, plus the Piedra River at Arboles, gives the total flow of San Juan at Rosa.

Drainage Area—1,990 square miles.

Records Available—October 1, 1920, to September 30, 1936.

Maximum discharge observed during period 1930-36: about 10,400 second-feet.

Maximum Discharge—Year 1935; 10,400 second-feet June 21, 1935. Gage height, 7.60 feet.

Maximum Discharge—Year 1936; 6,580 second-feet June 21, 1936.

Accuracy—Records considered fair for 1935 except those estimated, which are poor. Records considered good for 1936 except for periods of ice effect December 10 to February 21, February 24-28, and those for period of missing or uncertain gage height record, March 10, March 28 to May 10, May 12-25, June 13, 14, which were computed on basis of weather records and records for other stations on same stream. These are poor.

Diversions for irrigation above station.

WEST FORK OF SAN JUAN RIVER NEAR PAGOSA SPRINGS, COLORADO

Location—Water stage recorder in NE $\frac{1}{4}$ Sec. 12, T. 36 N., R. 1 W., on downstream side of highway bridge 0.6 miles above mouth and 10 miles northeast of Pagosa Springs.

Drainage Area—87.9 square miles.

Records Available—April 26, 1935, to September 30, 1936.

Maximum discharge observed during period 1935-36: 2,250 second-feet June 15, 1935. Gage height, 6.83 feet.

Maximum Discharge—Year 1935; 2,250 second-feet June 15, 1935. Gage height, 6.23 feet.

Maximum Discharge—Year 1936; 1,210 second-feet May 5, 1936. Gage height, 4.85 feet.

Accuracy—Records considered good except those estimated in 1935 and for periods of ice effect, November 21-23, 25, 26, 29, 30, December 1, 2, 4-9, December 11, 1935, to March 12, 1936, which were computed on basis of records for San Juan River at Pagosa Springs and weather records, and are poor.

Diversions for irrigation above station.

RIO BLANCO NEAR PAGOSA SPRINGS, COLORADO

Location—Water stage recorder in center of Sec. 1, T. 34 N., R. 1 E., at highway bridge 0.3 mile above mouth of Leche Creek and 12.5 miles southeast of Pagosa Springs.

Drainage Area—58 square miles.

Records Available—May 24, 1935, to September 30, 1936.

Maximum Discharge—Year 1935; 1,230 second-feet June 13, 1935.

Maximum Discharge—Year 1936; 1,330 second-feet August 6, 1936. Gage height, 3.90 feet.

Accuracy—Records considered fair except those estimated for 1935 which are poor, and for periods of ice effect November 19 to December 4, December 9, December 11, 1935, to January 21, 1936, January 23-29, January 31 to March 19, which are poor and were computed on basis of four discharge measurements, records for Rito Blanco and San Juan near Pagosa Springs, and weather records.

Diversions for irrigation above station.

RITO BLANCO NEAR PAGOSA SPRINGS, COLORADO

Location—Water stage recorder in SW $\frac{1}{4}$ Sec. 12, T. 34 N., R. 1 W., at road crossing 0.1 mile above Sheep Cabin Creek and 7 $\frac{3}{4}$ miles southeast of Pagosa Springs.

Drainage Area—23.3 square miles.

Records Available—May 1, 1935, to September 30, 1936.

Maximum discharge observed during period 1935-36: 310 second-feet June 9, 1935. Gage height, 2.87 feet.

Maximum Discharge—Year 1935; 310 second-feet June 9, 1935. Gage height, 2.87 feet.

Maximum Discharge—Year 1936; 250 second-feet April 12, 1936. Gage height 2.68 feet.

Accuracy—Records considered fair except those estimated in 1935 and those for periods of ice effect November 28 to December 4, December 15, 16, 18-30, 1935, January 1 to March 4, 1936, which are poor. They were computed on basis of records for Rio Blanco and San Juan Rivers at Pagosa Springs and weather records.

Diversions for irrigation above station.

NAVAJO RIVER NEAR CHROMO, COLORADO

Location—Water stage recorder in SW $\frac{1}{4}$ Sec. 6, T. 32 N., R. 2 E., 3.5 miles east of Chromo.

Drainage Area—118 square miles.

Records Available—May 27, 1935, to September 30, 1936.

Maximum discharge observed during period 1935-36: 1,920 second-feet June 16, 1935. Gage height, 4.46 feet.

Maximum Discharge—Year 1935; 1,920 second-feet June 16, 1935. Gage height, 4.46 feet.

Maximum Discharge—Year 1936; 872 second-feet April 12, 1936. Gage height about 3.75 feet.

Accuracy—Records considered good except those estimated in 1935, which are fair, and those for periods of ice effect November 17-22, 24-26, 28-30, December 1, 3, 5, 6, December 15, 1935, to March 6, and March 8, 1936, which are poor. They were computed on basis of two discharge measurements, records for Navajo River at Edith and San Juan River at Pagosa Springs, and weather records.

Diversions for irrigation above station.

NAVAJO RIVER AT EDITH, COLORADO

Location—Water stage recorder in NW $\frac{1}{4}$ Sec. 24, T. 32 N., R. 1 W., at highway bridge one-fourth mile east of Edith and one mile above mouth of Coyote Creek. Prior to January 1, 1929, staff gage at same site but unknown datum.

Drainage Area—165 square miles.

Records Available—September, 1912, to December, 1928, June, 1935, to September 30, 1936.

Maximum discharge observed during period 1935-36: 1,360 second-feet June 16, 1935. Gage height, 4.89 feet.

Maximum Discharge—Year 1936; 1,180 second-feet April 12, 1936. Gage height, 4.65 feet.

Accuracy—Records considered good except for those estimated June 1, September 12, 13, 1935, and for period of ice effect December 12 to March 12, 1936, and for period November 23 to December 3, 1935, which were computed on basis of one discharge measurement, records for Navajo River near Chromo and San Juan River at Pagosa Springs, and weather records.

Diversions for irrigation above station.

LITTLE NAVAJO RIVER AT CHROMO, COLORADO

Location—Water stage recorder in SE $\frac{1}{4}$ Sec. 4, T. 32 N., R. 1 E., at highway bridge one-fourth mile above mouth at Chromo.

Drainage Area—21.9 square miles.

Records Available—May 28, 1935, to September 30, 1936.

Maximum discharge observed during period 1935-36: 227 second-feet, April 13, 1936. Gage height 3.90 feet.

Maximum Discharge—Year 1935; 162 second-feet June 9, 1935. Gage height, 3.16 feet.

Maximum Discharge—Year 1936; 227 second-feet April 13, 1936. Gage height, 3.90 feet.

Accuracy—Records considered fair except those estimated in 1935 and good in 1936 except those for ice periods December 12, 1935, to March 13, 1936, and those estimated for October 23-30,

November 28 to December 3, 1935, which were computed on basis of three discharge measurements, weather records and records of related run-off.

Diversions for irrigation above station.

PINE OR LOS PINOS RIVER NEAR BAYFIELD, COLORADO

Location—Water stage recorder in Sec. 26, T. 36 N., R. 7 W., nine miles north of Bayfield and one-fourth mile below Red Creek.

Drainage Area—284 square miles. Altitude—7,500 feet above mean sea level.

Records Available—October 26, 1927, to September 30, 1936.

Maximum mean daily discharge observed during period 1927-36: 5,070 second-feet May 26, 1926. (Greatest known flood occurred October 5, 1911. Discharge not determined.)

Maximum Discharge—Year 1935; 4,020 second-feet June 16, 1935. Gage height, 6.58 feet.

Maximum Discharge—Year 1936; 2,560 second-feet May 5, 1936. Gage height, 5.40 feet.

Accuracy—Records considered excellent except for period April 2 to June 12, 1935, which are good, and those estimated December 9 to April 1, 1935, which are fair, and during period of ice effect December 26 to February 20, 1936, which were computed on basis of one discharge measurement, weather records. Those for August 20, 29, 30 were computed on basis of records for Animas River at Durango.

Diversions for irrigation above station. Natural regulation by numerous lakes.

PINE OR LOS PINOS RIVER AT IGNACIO, COLORADO

Location—Water stage recorder in Sec. 5, T. 33 N., R. 7 W., three-fourths mile above Ignacio and about two miles above Rock Creek.

Drainage Area—448 square miles.

Records Available—April 22, 1899, to October 31, 1903; September 1, 1910, to November 30, 1912; March 10, 1913, to September 30, 1936.

Maximum discharge observed during period 1910-14, 1930-36: 5,570 second-feet August 27, 1932. Gage height, 6.19 feet.

Maximum Discharge—Year 1935; 4,270 second-feet June 16, 1935. Gage height, 5.57 feet.

Maximum Discharge—Year 1936; 2,860 second-feet May 6, 1936. Gage height, 4.85 feet.

Accuracy—Records considered fair except those estimated and for periods of ice effect December 14-21, 1935, December 30 to February 20, 1936, February 26, 29, which are poor and were computed on basis of record, for San Juan River at Rosa, New Mexico, and Animas River at Cedar Hill, New Mexico, weather records and three discharge measurements.

Diversions for irrigation above station.

ANIMAS RIVER AT HOWARDSVILLE, COLORADO

Location—Water stage recorder in Sec. 12, T. 41 N., R. 7 W., 0.4 mile southwest of Howardsville and one-half mile below mouth of Cunningham Creek.

Drainage Area—55.9 square miles.

Records Available—May 1, 1936, to September 30, 1936.

Maximum Discharge—Year 1936; 838 second-feet May 25, 1936. Gage height, 2.52 feet.

Accuracy—Records considered good except those estimated for May 1, 23, which are fair.

No diversions above station.

ANIMAS RIVER AT DURANGO, COLORADO

Location—Water stage recorder in Sec. 20, T. 35 N., R. 9 W., at Western Colorado Power Company's plant in Durango, and one-fourth mile above mouth of Lightner Creek.

Drainage Area—692 square miles. Zero of gage is 6,503.28 feet above mean sea level.

Records available—June 20, 1895, to December 31, 1905, January 1, 1910, to September 30, 1936.

Maximum discharge observed during period 1895-1905, 1910-36; about 25,000 second-feet October 5, 1911. Gage height, 13.6 feet from rating curve extended above 7,000 second-feet.

Maximum Discharge—Year 1935; 6,560 second-feet June 15, 16, 1935. Gage height, 6.00 feet.

Maximum Discharge—Year 1936; 3,890 second-feet May 6, 1936. Gage height, 4.68 feet.

Accuracy—Records considered excellent except for periods estimated, January 20, 21, February 18-25, 1935, which are good and for those for February, 1936, and for July 2-12, July 30 to August 4 which were computed on basis of records for Pine River near Bayfield.

Diversions for irrigation above station. Regulation of flow for power and by numerous lakes.

CEMENT CREEK NEAR SILVERTON, COLORADO

Location—Water stage recorder in Sec. 31, T. 42 N., R. 7 W., at Yukon Mine, three miles northwest of Silverton.

Drainage Area—13.5 square miles.

Greatest known flood occurred October 5, 1911. (Discharge not determined.)

Maximum Discharge—Year 1936; 547 second-feet by slope-area method July 18, 1936. Gage height, 4.45 feet.

Accuracy—Records considered good except those estimated for May 1 and July 19-22, which are fair.

No diversions above station that are not returned to creek.

MINERAL CREEK NEAR SILVERTON, COLORADO

Location—Water stage recorder in Sec. 13, T. 41 N., R. 8 W., 300 feet above mouth of Bear Creek and two miles west of Silverton.

Drainage Area—43.9 square miles.

Records Available—May 1 to September 30, 1936.

Maximum Discharge—Year 1936; 711 second-feet May 29, 1936. Gage height, 3.27 feet.

No diversions above station.

CASCADE CREEK NEAR TACOMA, COLORADO

Location—Water stage recorder in Sec. 11, T. 39 N., R. 9 W., near power company caretaker's house where Durango-Silverton U. S. highway No. 550 crosses Cascade Creek, 10 miles north of Tacoma.

Drainage Area—26.8 square miles. Altitude—8,853 feet above mean sea level.

Records Available—January 1, 1915, to September 30, 1936.

Complete records furnished by the Western Colorado Power Company.

No diversions above station.

LIGHTNER CREEK NEAR DURANGO, COLORADO

Location—Water stage recorder in Sec. 26, T. 35 N., R. 10 W., three miles west of Durango at concrete highway bridge.

Drainage Area—64 square miles.

Records Available—July 1, 1927, to September 30, 1936.

Maximum discharge observed during period 1927-36: 655 second-feet April 4, 1929. Gage height, 2.71 feet.

Maximum Discharge—Year 1935; 310 second-feet August 16, 1935. Gage height, 2.40 feet.

Maximum Discharge—Year 1936; 450 second-feet April 12, 1936. Gage height, 2.10 feet.

Accuracy—Records considered good except for those estimated October 20-23, November 2, 1934, to February 22, June 16-19, 1935, and for period of ice effect December 3 to February 27, 1936, which are poor and were computed on basis of one discharge measurement and weather records, and those estimated for October 24-28, 1935, August 24, September 4-9, 20, 21, 1936, which are fair.

Diversions for irrigation above station.

FLORIDA RIVER NEAR DURANGO, COLORADO

Location—Water stage recorder in Sec. 4, T. 35 N., R. 8 W., 10½ miles northeast of Durango and just below mouth of Red Creek. During period of record this station has been located at several different sites in same vicinity. Prior to October 1, 1934, station was located one-fourth mile downstream; different datum. All records are comparable.

Drainage Area—96 square miles. Zero of gage is 7,303.58 feet above mean sea level.

Records available—May 21 to July 31, 1899, April 1, 1901, to October 5, 1903, September 8, 1910, to September 30, 1924, April 1, 1927, to September 30, 1936.

Maximum discharge observed during period 1899, 1901-3, 1910-24, 1927-36: 4,640 second-feet June 28, 1927. Gage height, 4.50 feet, former site and datum. Greatest known flood occurred October 5, 1911. (Discharge not determined.)

Maximum Discharge—Year 1935; 1,440 second-feet June 15, 1935. Gage height, 4.25 feet.

Maximum Discharge—Year 1936; 728 second-feet May 5, 1936. Gage height, 2.98 feet.

Accuracy—Records considered good except for those estimated for December 1 to February 28, 1935, on basis of one discharge measurement and temperature records, and for period ice effect December 1 to March 10, 1936, which are fair and were computed on basis of three discharge measurements and weather records, and those for April 12-15, July 9-12, based on records of Animas River at Durango.

Diversions for irrigation above station.

LA PLATA RIVER AT HESPERUS, COLORADO

Location—Water stage recorder in Sec. 14, T. 35 N., R. 11 W., at weir one-eighth mile west of Hesperus.

Drainage Area—37 square miles. Altitude—8,100 feet above mean sea level.

Records Available—June 15 to August 11, 1904; April 1, 1906, to August 11, 1906, August 24 to December 31, 1910, May 25, 1917, to September 30, 1936.

Maximum discharge observed during period 1904, 1906, 1910, 1917-36: 1,460 second-feet June 28, 1927. Gage height, 4.60 feet, former datum.

Maximum Discharge—Year 1935; 549 second-feet June 15, 1935. Gage height, 1.87 feet.

Maximum Discharge—Year 1936; 402 second-feet May 5, 1936. Gage height, 2.25 feet.

Accuracy—Records considered good except those for period of ice effect November 19, 1934, to March 30, 1935, which were estimated on basis of seven discharge measurements and weather records and those for November 7, 1935, to March 9, 1936, which are fair and were estimated on basis of three discharge measurements and weather records.

Diversions for irrigation above station.

LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

Location—Water stage recorder in Sec. 10, T. 32 N., R. 13 W., 300 feet south of Colorado-New Mexico state line at Hill ranch and three miles north of Pendleton, New Mexico.

Drainage Area—331 square miles. Zero of gage is 5,975.15 feet above mean sea level.

Records Available—February 19, 1920, to September 30, 1936.

Maximum discharge observed during period 1920-36; 4,750 second-feet August 24, 1927. Gage height, 10.9 feet.

Maximum Discharge—Year 1935; 321 second-feet June 15, 1935. Gage height, 2.62 feet.

Maximum Discharge—Year 1936; 2,240 second-feet August 30, 1936. Gage height, 6.60 feet.

Accuracy—Records considered good except those for periods October 13, 1934, to January 31, 1935, February 15-17, 19, July 13-19, August 2-4, 8, 13-14, September 7-23, 29, 30, which were estimated and for period of ice effect, December 15, 1935, to February 7, 1936, which were computed on basis of two discharge measurements and weather records, and are fair.

Diversions for irrigation above station.

CHERRY CREEK NEAR RED MESA, COLORADO

Location—Water stage recorder in Sec. 7, T. 33 N., R. 12 W., one-half mile above mouth and two miles northwest of Red Mesa.

Drainage Area—66 square miles.

Records Available—March 21, 1928, to September 30, 1936.

Maximum discharge observed during period 1928-36; 803 second-feet August 26, 1934. Gage height, 4.50 feet.

Maximum Discharge—Year 1935; 82 second-feet April 15, 1935. Gage height, 2.20 feet.

Maximum Discharge—Year 1936; 150 second-feet April 14, 1936. Gage height, 2.80 feet.

Accuracy—Records considered fair. Discharge estimated February 1 to March 27, 1935, June 15-21, July 8-10, August 12-20, September 4-8, 13-25, 27-30, and March 1-5, 1936, September 9, 11-30, 1936. No records October, 1934, to March 1, 1935, and from October 11, 1935, to February 29, 1936.

Diversions for storage and irrigation above station.

MANCOS RIVER NEAR MANCOS, COLORADO

Location—Water stage recorder in Sec. 23, T. 36 N., R. 13 W., just below the junction of the Middle and West Forks of Mancos River, and two miles east of Mancos.

Drainage Area—73 square miles.

Records Available—October 1, 1931, to September 30, 1936.

Maximum discharge observed during period 1931-36: 506 second-feet May 5, 1936. Gage height, 3.00 feet.

Maximum Discharge—Year 1935; 404 second-feet June 7, 1935. Gage height, 3.10 feet.

Maximum Discharge—Year 1936; 506 second-feet May 5, 1936. Gage height, 3.00 feet.

Accuracy—Records considered fair. Discharge estimated for November 23, 1934, to March 20, 1935, October 28, 29, December 2-4, December 19, 1935, to February 15, 1936. Estimates based on discharge measurements and weather records.

Diversions for irrigation above station.

MANCOS RIVER NEAR TOWAOC, COLORADO

Location—Water stage recorder in Sec. 15, T. 32 N., R. 18 W., at Mancos River Trading Post 12 miles south of Towaoc.

Drainage Area—558 square miles.

Records Available—February, 1921, to September 30, 1936.

Maximum discharge observed during period 1921-36: 4,900 second-feet August 26, 1934. Gage height 5.85 feet.

Maximum Discharge—Year 1935; 439 second-feet May 26, 1935. Gage height, 1.77 feet.

Maximum Discharge—Year 1936; 2,310 second-feet September 3, 1936. Gage height, 4.08 feet.

Accuracy—Records considered fair. Discharge estimated October 28-31, 1934, April 22, 23, 1935, September 19-24, November 6, 1935, to March 12, 1936, March 23-27, 29, April 4-7, and computed on basis of discharge measurement and weather records.

Diversion for irrigation above station.

Discharge of San Juan River Near Pagosa Springs, Colorado, for Year Ending Sept. 30, 1935												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*140	498	682	202	73
2	*120	526	658	180	67
3	*110	682	618	152	62
4	*110	778	603	207	57
5	*110	859	547	218	55
6	114	1000	540	166	51
7	*150	1090	547	190	61
8	198	1110	554	148	69
9	214	1210	547	183	54
10	304	1210	505	155	48
11	435	1170	491	178	46
12	477	1080	505	152	42
13	491	1120	456	126	39
14	400	1140	442	114	37
15	358	1120	442	105	37
16	388	1030	358	97	36
17	407	1020	352	90	35
18	388	1010	364	84	34
19	364	1060	428	76	33
20	400	1140	421	70	34
21	370	1150	376	68	35
22	382	1050	364	94	35
23	435	1000	328	80	35
24	498	985	316	96	42
25	642	913	304	72	48
26	786	868	298	82	74
27	658	913	275	101	82
28	596	868	250	92	60
29	642	770	280	96	50
30	603	746	*250	97	45
31	561	.....	*270	82	47
Total								11851	29116	13371	3853	1476
Mean								382	971	431	124	49.2
Max.								786	1210	682	218	82
Min.								110	498	250	68	33
Acre-ft.								23510	57750	26520	7640	2930

Total run-off for period = 118,400 acre-feet.

*Estimated.

Discharge of San Juan River Near Pagosa Springs, Colorado, for Year Ending Sept. 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	18	14	15	.	16	40	435	428	68	47	120
2	39	20	13	15	.	17	40	519	364	65	62	97
3	38	20	16	15	.	18	38	610	280	63	70	180
4	38	20	17	15	.	20	35	738	240	58	94	138
5	35	20	17	15	.	22	31	826	230	55	235	112
6	33	20	17	15	.	24	34	754	265	53	250	83
7	32	20	17	15	.	26	42	561	292	51	190	83
8	30	20	17	15	.	28	74	407	316	52	166	74
9	30	20	17	15	.	30	94	310	316	76	135	68
10	30	21	17	15	.	33	118	255	310	72	101	65
11	32	21	18	15	.	37	218	245	298	172	105	94
12	33	21	20	15	.	40	346	310	292	99	96	69
13	34	21	25	15	.	34	407	400	255	73	80	61
14	34	20	21	15	.	38	388	435	240	64	72	55
15	34	21	12	15	.	43	364	456	230	63	67	49
16	34	24	13	15	.	46	394	575	250	68	63	44
17	34	21	14	15	.	49	435	618	240	63	58	42
18	32	20	15	15	.	49	421	618	214	54	69	42
19	34	20	16	15	.	49	421	610	183	51	70	41
20	46	20	15	15	.	49	484	626	166	50	110	37
21	44	19	*15	15	.	45	526	610	150	43	96	35
22	38	19	15	15	.	42	554	596	150	42	78	62
23	34	18	15	15	.	40	533	568	132	37	67	43
24	31	16	15	15	.	38	484	561	122	37	60	36
25	30	17	15	15	.	36	519	533	110	34	53	34
26	27	14	15	15	.	36	533	505	97	34	48	34
27	25	14	15	15	.	36	505	526	89	42	46	41
28	24	14	15	15	.	36	512	533	83	49	67	44
29	22	14	15	15	.	38	470	540	77	53	88	42
30	20	14	15	15	.	40	400	526	72	48	208	42
31	18	14	15	15	.	38	484	484	51	148	34	34
Total	1006	567	496	465	435	1093	9460	16290	6491	1840	3099	1967
Mean	32.5	18.9	16.0	15	.	35.3	315	525	216	59.4	100	65.6
Max.	46	24	25	.	.	49	554	826	428	172	250	180
Min.	18	14	12	.	.	16	31	245	72	34	46	34
Acre-ft.	2000	1120	984	922	863	2170	18760	32310	12870	3650	6150	3900

Total run-off for water year 1935-36 = 85,699 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of San Juan River at Pagosa Springs, Colorado, for Year Ending Sept. 30, 1935												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1									1410	2320	546	294
2									1380	2230	480	252
3									1540	2070	*450	226
4									1850	2070	*470	199
5									2070	1920	*460	188
6									2490	1850	*420	169
7									May 13 to 31	2670	1850	*390
8									3150	1780	*370	167
9											403	218
10									3780	1750	381	186
11									3780	1640	385	164
12									3670	1560	390	149
13									1550	3670	1470	134
14									*1350	3670	1340	122
15									*1200	4120	1300	267
16									*1250	4000	1130	261
17									*1300	3350	1070	112
18									*1200	3250	1040	232
19									*1200	3250	1140	207
20									*1300	*3600	1040	186
21									1240	3890	992	174
22									1220	3560	952	209
23									1270	3350	848	199
24									1310	3460	770	226
25									1510	3050	688	191
26									1740	2950	640	234
27									1720	2950	580	294
28									1600	2760	563	218
29									1550	2490	590	264
30									1680	2490	541	172
31									1560	612	365	140
Total									26750	90600	40196	9995
Mean.									1408	3020	1297	322
Max..									1740	4120	2320	546
Min..									1200	1380	541	94
Acre-ft.									53060	179700	79730	19820
												9710

Total run-off for the period=342,020 acre-feet.

Discharge of San Juan River at Pagosa Springs, Colorado, for Year Ending Sept. 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	126	60	50	43	43	54	118	1080	1340	191	101	510
2	114	68	48	34	40	62	132	1280	1140	162	118	430
3	105	68	50	46	27	71	142	1470	920	149	162	605
4	96	70	50	41	28	89	112	1640	805	140	164	563
5	92	72	59	46	43	114	105	2000	763	128	580	430
6	89	73	58	46	50	118	99	2000	805	116	856	357
7	82	62	52	45	52	120	162	1360	848	109	700	298
8	78	62	46	48	49	130	317	1190	872	107	607	267
9	74	58	44	45	43	158	357	840	856	162	460	246
10	73	60	39	46	43	194	421	763	833	160	369	218
11	71	58	41	43	40	189	602	742	777	474	313	390
12	70	60	46	45	43	191	840	840	756	373	280	305
13	68	59	60	36	43	209	968	1000	688	243	223	255
14	66	60	43	40	44	243	1030	1080	646	179	189	234
15	65	46	25	45	43	237	976	1130	607	164	174	191
16	64	50	26	46	43	220	1050	1300	563	176	155	172
17	62	53	30	35	40	223	1150	1430	500	164	144	160
18	59	66	35	35	43	220	1090	1380	440	149	162	158
19	56	50	36	35	44	212	1010	1460	416	138	207	155
20	91	49	44	35	44	215	1160	1470	390	132	294	147
21	98	53	40	36	40	218	1220	1490	373	114	294	132
22	89	53	38	40	41	202	1340	1440	369	120	223	229
23	79	68	39	40	46	162	1360	1450	325	101	172	167
24	76	59	40	40	38	138	1210	1460	317	94	147	136
25	79	65	41	40	33	118	1180	1470	291	92	134	126
26	78	64	41	40	40	110	1180	1410	280	91	120	122
27	76	43	43	40	46	101	1200	1380	243	101	114	136
28	79	35	46	43	50	114	1170	1400	243	109	126	153
29	81	48	44	44	53	132	1140	1430	243	101	246	144
30	81	48	45	33	....	191	992	1450	220	114	817	158
31	68	48	33	33	144	....	1450	....	....	109	640	....
Total	2485	1740	1347	1264	1232	4899	23833	41285	17869	4762	9291	7594
Mean.	80.2	58.0	43.5	40.8	42.5	158	794	1332	596	154	300	253
Max..	126	73	60	48	53	243	1360	2000	1340	474	856	605
Min..	56	35	25	33	27	54	99	742	220	91	101	122
Acre-ft.	4930	3450	2670	2510	2440	9720	47270	81890	35440	9450	18430	15060

Total run-off for water year 1935-36=233,260 acre-feet.

*Estimated.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of San Juan River at Rosa, New Mexico, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1....	230	102	*70	*110	*240	240	1960	2060	*4100	4900	1260	756	
2....	210	128	*70	*110	*230	324	2240	1650	*3800	4500	1250	756	
3....	200	156	78	*120	*230	462	2640	1630	*4000	4400	1030	640	
4....	192	124	*100	*110	*230	348	2810	1510	*5000	4400	1110	560	
5....	176	132	114	*140	*240	300	2360	1630	*5800	4220	1520	553	
6....	164	132	*105	164	270	255	2130	1520	6760	3930	1210	490	
7....	156	136	*105	156	290	250	1650	1540	7000	4120	1220	490	
8....	144	144	*100	*140	290	255	2600	1810	7250	4020	990	810	
9....	140	136	*95	120	265	240	3460	2140	7500	3930	1060	656	
10....	132	136	*100	128	245	235	1700	2460	8000	3840	1160	525	
11....	128	132	*110	132	245	240	1560	3180	8510	3560	910	462	
12....	128	128	*120	148	235	230	1810	3660	7740	3380	1220	414	
13....	148	128	*140	*140	220	324	2060	4580	7980	3290	1000	384	
14....	152	124	*160	136	215	614	2720	4480	7970	3200	846	360	
15....	144	117	*150	160	205	796	3860	4060	8710	3030	747	336	
16....	144	111	*140	*140	*180	638	3960	3560	8700	2390	712	318	
17....	144	124	*130	*110	*150	558	4060	4160	7020	2170	720	295	
18....	136	144	*120	*80	*190	494	3460	3960	6570	2240	656	280	
19....	140	148	*120	*80	230	534	4060	4800	6580	2780	584	265	
20....	136	160	*130	*90	245	566	3960	7750	7020	2540	518	250	
21....	132	152	*130	*100	330	590	3560	7000	7250	2320	497	246	
22....	124	140	*140	*110	416	715	3660	*5000	7250	2390	546	246	
23....	117	128	*140	*130	367	715	3360	*4000	6360	2070	680	241	
24....	111	117	*130	*160	330	841	3960	*4100	6800	1790	792	246	
25....	111	124	*130	*200	275	880	2640	*4500	6140	1560	738	360	
26....	108	102	*130	*190	*250	1030	2080	*5100	5930	1370	747	584	
27....	108	*100	*140	*190	*230	1230	2160	*5400	5930	1260	1090	2780	
28....	105	108	164	*180	*220	1180	2350	*5200	5720	1220	900	1600	
29....	105	*100	152	*210	...	1260	2280	*4900	5000	1230	810	704	
30....	105	99	*95	*140	*230	...	1650	2460	*5000	5100	1290	1180	525
31....	99	...	*120	*230	...	2100	...	*4700	...	1210	1100	...	
Total	4369	3808	3773	4444	7063	2094	83570	117040	197490	88550	28803	17132	
Mean.	141	127	122	143	252	648	2786	3775	6553	2856	929	571	
Max.	230	160	164	230	416	2100	4060	7750	8710	4900	1520	2780	
Min.	99	95	70	80	150	230	1560	1510	3800	1210	497	241	
Acre-ft.	8670	7550	7480	8810	14010	39860	165800	232100	391700	175600	57130	33980	

Total run-off for water year 1934-35 = 1,143,000 acre-feet.

Discharge of San Juan River at Rosa, New Mexico, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	455	270	173	160	300	800	3100	3120	462	250	1320	...
2....	408	265	154	120	150	483	620	3300	2620	396	455	980
3....	378	275	140	170	100	680	700	3800	2170	354	731	1080
4....	378	260	144	160	110	900	760	4500	1780	318	846	1640
5....	372	250	144	170	160	1010	600	5200	1620	300	2700	1080
6....	342	218	173	170	190	1090	560	6000	1680	260	2860	864
7....	318	218	169	170	200	1210	600	4700	1770	232	2390	720
8....	306	228	169	180	190	1360	980	3500	1900	232	1680	624
9....	295	228	154	170	160	1520	1600	2900	1880	270	1290	560
10....	285	228	120	170	160	1730	2600	2400	1860	441	990	511
11....	270	232	120	160	150	1460	2800	1960	1740	680	873	672
12....	265	218	130	170	160	1330	3400	2400	1760	1250	950	801
13....	250	218	130	140	160	1560	4000	2900	1650	672	729	640
14....	255	218	120	150	170	1830	4500	3200	1550	497	608	592
15....	250	205	110	170	160	1930	4700	3500	1440	427	560	518
16....	246	189	100	170	160	1610	4500	3800	1380	441	518	462
17....	241	189	100	130	150	1420	4800	4100	1220	402	476	427
18....	236	205	120	120	160	1250	5000	4300	1090	390	483	427
19....	241	201	140	110	170	1330	4600	4300	1020	378	553	462
20....	568	185	170	120	170	1140	4300	4400	900	390	883	462
21....	408	185	150	130	150	1120	4600	4600	837	354	1000	402
22....	330	197	140	140	169	1250	4800	4000	783	342	584	680
23....	300	193	150	150	169	930	5000	3700	720	300	469	792
24....	336	197	160	150	140	648	4500	3600	688	250	396	490
25....	318	205	160	160	120	696	4300	3550	656	232	342	408
26....	312	223	160	160	150	553	4300	3290	648	228	312	372
27....	312	201	160	170	180	600	4200	3200	584	236	280	414
28....	324	177	180	170	190	540	4000	3200	525	312	275	483
29....	336	158	170	160	218	600	4000	3120	532	295	372	497
30....	348	177	170	120	...	700	3500	3380	532	275	1470	497
31....	300	180	130	...	900	...	3560	...	255	1770	...	...
Total	9983	6413	4560	4720	4676	33680	95620	113460	40655	11871	28095	19877
Mean.	322	214	147	152	161	1086	3187	3660	1355	383	906	663
Max.	568	275	180	180	218	1930	5000	6000	3120	1250	2360	1640
Min.	236	158	100	110	100	300	560	1960	525	228	250	372
Ac.-ft.	19800	12720	9040	9360	9270	66800	189700	225000	80640	23550	55730	39430

Total run-off for water year 1935-36 = 741,000 acre-feet.

*Estimated.

**Discharge of West Fork of San Juan River Near Pagosa Springs, Colorado, for Year
Ending Sept. 30, 1935**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*180	398	990	238	107
2	*170	430	965	203	101
3	150	580	990	188	90
4	*140	728	990	199	83
5	138	865	890	194	80
6	154	990	865	177	77
7	175	1160	965	154	95
8	201	1270	965	148	105
9	214	1390	890	162	86
10	240	1450	865	144	76
11	302	1580	818	142	64
12	353	1450	772	148	64
13	434	1420	682	132	61
14	350	1580	640	117	58
15	319	1790	600	107	55
16	334	1580	493	105	52
17	350	1180	458	107	50
18	322	1180	486	95	49
19	322	1330	580	87	47
20	375	1480	454	81	46
21	319	1580	423	79	46
22	346	1580	*420	83	45
23	392	*1480	*340	86	42
24	416	*1540	331	100	46
25	490	*1440	299	92	54
26	166	580	*1390	275	136
27	*170	580	*1360	265	134
28	*180	560	1180	248	119
29	*190	540	1070	258	132
30	*200	540	1100	240	134
31	476	.	291	116	.
Total	906	10462	37551	18748	4139
Mean.	Apr. 26	337	1252	605	134
Max.	to 30	580	1790	990	238
Min.	138	398	240	79	
Acre-ft.	1800	20750	74480	37190	8210
												3910

Total run-off for period=146,300 acre-feet.

**Discharge of West Fork of San Juan River Near Pagosa Springs, Colorado, for Year
Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	33	35	15	15	16	37	462	580	92	53	181
2	42	35	35	15	15	20	37	560	479	86	68	168
3	40	33	36	15	15	25	39	682	369	81	64	260
4	40	31	36	15	15	30	44	865	365	77	65	228
5	39	30	36	15	15	35	44	965	388	72	229	183
6	37	32	36	15	15	41	45	818	392	66	346	152
7	35	32	36	15	15	49	45	560	420	63	268	132
8	35	33	35	15	15	55	66	423	434	58	224	121
9	34	32	34	15	15	62	77	334	434	87	179	112
10	33	32	33	15	15	62	105	297	412	84	150	105
11	32	33	33	15	15	54	185	308	398	209	129	175
12	31	33	33	15	15	60	272	382	395	144	117	129
13	31	33	33	15	15	66	337	462	369	98	100	114
14	30	33	24	15	15	69	328	490	340	80	90	107
15	28	31	18	15	15	69	322	520	319	80	86	95
16	30	33	14	15	15	70	365	620	294	84	77	86
17	31	34	14	15	15	70	412	620	265	86	74	79
18	28	34	15	15	69	406	660	236	79	81	76	.
19	33	33	16	15	15	65	388	750	217	74	89	73
20	42	35	17	15	15	65	395	795	199	69	125	70
21	38	35	18	15	15	68	412	772	188	64	101	65
22	34	35	17	15	15	64	496	750	175	64	84	77
23	31	35	16	15	15	50	496	750	152	56	72	68
24	34	33	15	15	15	46	430	750	142	54	66	63
25	34	30	15	15	15	35	479	750	146	53	61	60
26	35	29	15	15	15	37	520	682	134	53	58	59
27	36	29	15	15	15	44	496	705	119	54	58	61
28	37	26	15	15	15	44	465	682	121	50	59	63
29	38	28	15	15	15	42	458	705	116	52	74	63
30	36	33	15	15	15	41	398	682	107	53	283	64
31	33	15	15	15	15	39	.	660	.	54	212	.
Total	1032	968	740	465	435	1562	8599	19461	8705	2376	3742	3289
Mean.	34.9	32.3	23.9	15	15	50.4	287	628	290	76.6	121	110
Max.	45	35	36	.	.	70	520	965	580	209	346	260
Min.	28	26	14	.	.	16	37	297	107	50	53	59
Acre-ft.	2150	1920	1470	922	863	3100	17060	38600	17270	4710	7420	6520

Total run-off for water year 1935-36=102,005 acre-feet.

*Estimated.

Unless otherwise noted, all discharges are in cubic feet per second.

STATE ENGINEER, COLORADO

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Discharge of Rio Blanco Near Pagosa Springs, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	370	458	165	106
2	405	430	108	81
3	498	405	84	68
4	638	400	129	62
5	546	370	222	55
6	618	360	195	49
7	698	360	191	*65
8	684	355	143	73
9	684	245	188	53
10	892	355	135	45
11	900	325	254	41
12	820	320	146	34
13	876	252	116	31
14	892	332	98	31
15	909	264	90	28
16	748	191	79	28
17	677	188	73	26
18	691	307	66	26
19	788	*350	60	24
20	804	316	51	23
21	740	264	51	23
22	664	244	103	22
23	719	219	70	22
24	*350	719	194	79
25	380	631	167	55
26	400	566	137	66
27	420	579	129	86
28	425	560	143	146
29	464	540	149	108
30	458	528	140	137
31	410	129	108	88
Total									3307	20384	8598	3609
Mean.									May 24	679	277	61.3
Max.									to 31	909	458	222
Min.										370	129	51
Acre-ft.									6560	40430	17050	7160

Total run-off for period=74,850 acre-feet.

*Estimated.

Discharge of Rio Blanco Near Pagosa Springs, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	79	26	22	12	13	14	24	375	272	41	30	137
2	70	28	22	12	13	15	17	480	212	36	40	100
3	66	24	22	12	13	17	22	560	155	37	79	293
4	62	21	18	12	13	20	22	624	137	33	243	158
5	53	17	16	12	13	26	21	733	152	28	403	96
6	49	14	16	12	13	31	19	664	180	27	544	68
7	45	16	16	12	13	37	19	469	202	47	294	51
8	44	18	17	12	13	43	49	325	212	45	184	37
9	42	17	13	12	13	50	84	244	212	66	118	31
10	39	18	9	12	13	53	108	205	202	93	90	33
11	37	17	10	12	13	50	180	240	188	256	68	111
12	34	19	11	12	13	54	307	316	177	90	58	66
13	31	22	12	12	13	58	340	350	152	55	45	47
14	30	23	11	12	13	62	312	360	149	44	41	37
15	30	18	10	12	13	66	302	390	146	44	36	31
16	27	19	10	12	13	68	320	452	140	45	39	26
17	27	21	10	12	13	70	325	447	132	39	42	24
18	24	23	11	12	13	70	320	425	121	36	62	28
19	39	30	12	12	13	70	320	420	113	34	62	27
20	70	25	13	12	13	70	370	430	98	27	152	22
21	56	25	12	12	13	70	553	385	88	26	79	21
22	42	29	12	12	13	60	469	340	90	26	51	235
23	37	31	12	14	13	44	425	340	88	21	41	56
24	39	28	12	14	13	39	395	345	88	17	34	36
25	42	25	12	14	13	31	430	320	73	15	28	27
26	44	22	12	14	13	31	415	316	68	14	23	36
27	42	21	12	14	13	31	410	335	66	41	22	56
28	44	20	12	14	13	31	420	340	60	36	37	77
29	41	22	12	14	13	26	365	365	58	41	78	92
30	33	22	12	17	...	23	312	335	49	36	264	75
31	24	...	12	15	...	27	...	325	...	34	208	...
Total	1342	661	413	393	377	1357	7675	12255	4080	1430	3495	2134
Mean	43.3	22.0	13.3	12.7	13	43.8	256	395	136	46.1	113	71.1
Max.	79	31	22	17	...	70	553	733	272	256	544	293
Min.	24	14	9	11	...	14	17	205	49	14	22	21
Acre-ft.	2660	1310	819	780	748	2690	15220	24310	8090	2840	6930	4230

Total run-off for water year 1935-36=70,627 acre-feet.

*Discharge measurement.

Discharge of Rito Blanco Near Pagosa Springs, Colorado, for Year Ending Sept. 30, 1935												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*50	109	66	8.5	4.1
2	*45	111	58	6.8	4.1
3	*40	135	54	4.8	3.6
4	*40	165	54	12	3.4
5	*40	168	49	15	3.2
6	*40	181	45	11	2.9
7	*40	203	44	12	3.6
8	*45	224	42	9.5	5.4
9	57	265	41	10	3.6
10	61	254	39	8.2	3.6
11	86	242	36	13	3.4
12	92	224	30	17	2.6
13	109	220	23	15	2.2
14	90	213	22	13	2.2
15	79	224	21	12	2.0
16	80	190	17	10	1.8
17	98	159	17	9.0	1.5
18	96	151	19	7.4	1.4
19	125	151	24	6.0	1.4
20	157	159	30	2.9	1.2
21	118	151	24	2.7	1.2
22	103	148	20	4.5	1.1
23	107	*140	19	3.8	1.0
24	111	*130	17	4.1	1.0
25	123	116	15	3.2	2.4
26	133	105	15	2.9	6.0
27	123	100	11	*10	12
28	116	94	7.8	6.0	7.4
29	123	80	13	7.1	6.0
30	135	75	9.5	7.1	4.3
31	121	...	8.2	5.4	...
Total	2783	4887	890.5	259.9	99.6
Mean.	89.8	163	28.7	8.38	3.32
Max..	157	265	66	17	12
Min..	40	75	7.8	2.7	1.0
Acre-ft.	5520	9690	1770	516	198

Total run-off for period=17,690 acre-feet.

*Estimated.

Discharge of Rito Blanco Near Pagosa Springs, Colorado, for Year Ending Sept. 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.8	1.2	2.5	2.5	1.6	2.2	11	102	46	1.2	3.4	9.0
2	3.2	2.1	2.5	2.5	1.6	2.5	14	111	40	1.1	2.6	6.8
3	2.9	1.1	2.5	2.5	1.6	3.5	15	127	32	1.0	5.8	16
4	2.6	.8	2.8	2.5	1.6	4.5	11	146	28	1.0	7.7	13
5	2.6	.4	2.7	2.5	1.6	6.5	8.6	162	24	1.0	22	9.8
6	2.4	.6	2.2	2.0	2.0	6.8	9.0	143	21	.9	22	7.9
7	2.2	1.2	2.1	2.5	2.0	7.5	14	108	21	1.0	16	6.8
8	2.2	1.2	2.7	2.5	2.0	9.8	38	69	22	1.4	13	6.2
9	2.1	1.2	3.2	2.5	2.0	11	56	56	22	4.3	9.4	5.5
10	2.0	1.0	2.1	2.5	2.0	12	76	49	23	3.2	7.9	5.2
11	2.0	.9	2.0	2.5	2.0	13	117	49	22	1.3	6.8	11
12	1.9	1.0	1.8	2.5	2.0	29	156	50	21	7.9	5.2	7.5
13	1.9	1.0	1.8	2.5	2.0	60	149	52	18	5.2	4.5	5.5
14	1.8	1.1	2.6	2.5	2.0	26	133	54	18	3.8	4.1	5.0
15	1.8	.9	3.0	2.5	2.0	18	124	56	17	3.6	3.6	3.8
16	1.8	1.0	3.3	2.0	2.0	18	117	69	16	1.8	3.6	2.6
17	1.6	1.5	3.6	2.0	2.0	18	124	73	13	1.0	4.0	2.2
18	1.5	2.4	2.5	2.0	2.0	15	114	71	11	.9	6.0	2.6
19	1.6	1.6	2.5	2.0	2.0	15	120	69	9.8	1.0	4.3	2.9
20	4.5	3.6	2.5	2.0	2.0	19	139	67	9.4	1.2	6.2	3.2
21	4.1	3.6	2.5	2.5	*20	2.0	17	139	65	7.2	1.0	6.2
22	2.9	3.8	2.5	2.0	2.0	14	149	58	7.2	1.0	4.1	12
23	2.4	4.5	2.5	2.0	2.0	13	139	56	5.0	.7	3.6	5.5
24	2.4	2.4	2.5	2.0	2.0	15	139	54	4.3	.4	2.9	3.2
25	2.0	2.6	2.5	2.0	2.0	11	143	54	3.7	.4	2.4	3.4
26	2.1	2.2	2.5	2.0	2.0	15	133	52	2.9	.4	1.0	3.2
27	2.6	1.6	2.5	2.0	2.0	14	127	52	2.6	.8	.9	4.3
28	2.7	2.0	2.5	2.0	2.0	12	127	50	2.1	1.1	1.0	5.2
29	2.4	2.5	2.5	1.6	2.0	9.4	114	49	2.0	2.5	4.6	5.8
30	2.2	2.5	2.5	1.6	...	11	98	49	1.8	2.9	15	6.2
31	2.0	...	2.1	1.6	...	11	...	52	...	2.0	11	...
Total	74.2	53.5	78.0	68.3	56.0	439.7	2853.6	2274	473.0	68.7	210.8	184.0
Mean.	2.39	1.78	2.52	2.20	1.93	14.2	95.1	73.4	15.8	2.22	6.80	6.13
Max..	4.5	4.5	3.6	2.5	2.0	60	156	162	46	13	22	16
Min..	1.5	4	1.8	1.6	1.6	2.2	8.6	49	1.8	.4	.9	2.2
Acre-ft.	147	106	155	135	111	872	5660	4510	938	136	418	365

Total run-off for water year 1935-36=13,553 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Navajo River Near Chromo, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	414	545	*170	124	
2	438	510	*160	121	
3	573	492	154	103	
4	699	498	212	94	
5	824	462	285	89	
6	824	450	240	80	
7	800	432	244	96	
8	768	408	186	108	
9	889	402	228	82	
10	1100	402	171	78	
11	1080	379	168	74	
12	979	374	164	69	
13	1050	335	145	65	
14	1200	325	127	62	
15	1340	340	113	58	
16	1290	272	105	58	
17	1030	249	98	52	
18	898	254	89	50	
19	907	315	82	50	
20	1020	310	76	51	
21	1030	320	69	50	
22	943	305	67	50	
23	848	262	72	50	
24	840	236	87	52	
25	776	212	69	58	
26	752	196	146	117	
27	531	178	162	193	
28	*560	168	138	127	
29	587	145	159	105	
30	608	142	189	89	
31	510	148	142	.	
Total									2796	25863	10066	4517	2455
Mean									May 27	862	325	146	81.8
Max..									to 31	1340	545	285	193
Min..										414	142	67	50
Acre-ft.									5550	51300	19970	8960	4870

Total run-off for period = 90,650 acre-feet.

*Estimated.

Discharge of Navajo River Near Chromo, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	42	37	30	33	35	87	438	362	82	79	145
2	76	44	41	30	33	35	76	510	310	78	96	105
3	72	43	38	30	33	35	67	622	249	72	161	153
4	74	41	33	30	33	40	52	657	232	71	153	138
5	71	38	32	30	33	45	51	713	236	67	403	108
6	67	41	33	30	33	50	57	643	267	69	249	91
7	65	44	34	30	33	60	84	517	280	69	236	84
8	63	41	32	30	33	70	158	426	285	67	161	78
9	62	40	31	30	33	80	196	340	290	71	118	71
10	60	40	29	30	33	82	240	295	290	87	100	71
11	58	37	29	30	33	65	374	280	262	171	94	105
12	56	36	33	30	33	69	517	335	254	121	84	89
13	54	35	35	30	33	84	545	408	232	87	72	74
14	52	34	33	30	33	118	559	444	224	78	65	67
15	52	33	20	30	33	124	573	456	212	76	62	65
16	52	28	21	30	33	118	587	524	200	76	65	60
17	51	28	23	30	33	118	601	538	182	69	62	58
18	48	30	25	30	33	124	573	545	168	63	65	69
19	52	35	27	30	33	121	552	504	154	62	83	74
20	67	33	30	30	33	127	601	504	148	57	129	63
21	56	34	30	30	33	82	636	492	132	57	103	60
22	50	35	30	33	33	118	629	468	132	58	78	203
23	48	41	30	30	33	89	615	462	124	52	65	116
24	50	38	30	30	33	78	566	450	116	50	58	87
25	48	39	30	30	33	78	601	438	108	50	56	76
26	47	38	30	30	33	78	601	384	100	47	54	78
27	48	32	30	30	33	78	566	357	96	56	51	87
28	48	25	30	30	33	82	517	379	91	60	52	89
29	48	30	30	30	33	94	468	426	98	52	112	87
30	46	33	30	30	33	121	426	420	96	51	168	91
31	41	30	38	38	33	113	390	390	52	154	.	.
Total	1762	1088	946	932	957	2611	12175	14365	5930	2178	3488	2747
Mean	56.8	36.3	30.5	30.1	33	84.2	406	463	198	70.3	113	91.6
Max..	80	44	41	38	....	127	636	713	362	171	403	208
Min..	41	25	20	24	....	51	280	91	47	51	51	58
Acre-ft.	3490	2160	1880	1850	1900	5180	24150	28490	11760	4320	6920	5450

Total run-off for water year 1935-36 = 97,550 acre-feet.

†Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

TWENTY-EIGHTH BIENNIAL REPORT

Discharge of Navajo River at Edith, Colorado, for Year Ending Sept. 30, 1935												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1									*600	608	168	142
2									608	576	146	138
3									710	548	146	120
4									780	544	176	112
5									805	512	242	108
6									905	484	198	104
7									930	484	218	114
8									905	480	150	140
9									982	453	215	106
10									1040	436	152	102
11									1010	404	144	102
12									980	400	154	*90
13									955	348	135	*80
14									1010	341	117	75
15									1120	386	109	71
16									1060	278	100	63
17									880	251	94	58
18									855	260	88	51
19									905	352	83	47
20									955	327	80	49
21									955	330	77	50
22									905	324	77	50
23									855	266	80	50
24									855	233	91	54
25									755	208	81	64
26									755	190	169	121
27									755	174	176	272
28									710	166	152	148
29									642	154	158	131
30									643	140	218	112
31									25724	10801	4368	2924
Total									857	348	141	97.5
Mean.									1120	608	242	272
Max..									600	140	77	47
Acre-ft.									51020	21420	8660	5800

Total run-off for period = 86,900 acre-feet.

*Estimated.

Discharge of Navajo River at Edith, Colorado, for Year Ending Sept. 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	102	48	42	35	38	52	129	536	358	83	56	154
2	96	52	42	35	38	60	144	592	299	73	98	112
3	91	50	42	35	38	70	154	688	236	78	144	146
4	96	48	41	35	38	80	117	755	210	73	142	150
5	91	40	39	35	38	100	119	805	205	71	449	119
6	87	40	31	35	38	110	136	755	212	71	236	104
7	85	44	28	35	38	120	168	588	236	70	228	96
8	83	45	24	35	38	125	314	496	251	72	156	87
9	78	44	23	35	38	150	386	408	245	69	126	80
10	77	45	22	35	38	180	442	330	251	85	108	77
11	76	44	26	35	38	180	620	311	236	140	108	108
12	73	46	30	35	38	180	755	352	236	129	97	97
13	72	44	45	35	38	228	805	453	212	92	84	80
14	71	45	25	35	38	242	805	500	202	81	75	72
15	70	40	24	35	38	248	780	492	200	80	71	67
16	69	40	25	35	38	225	780	572	188	76	71	64
17	66	40	27	35	38	210	805	596	170	76	72	62
18	63	44	31	35	38	215	732	592	158	66	70	69
19	62	45	32	35	38	215	710	580	148	63	83	76
20	90	42	37	35	38	210	732	564	135	63	126	73
21	76	43	35	35	38	210	780	556	129	61	112	67
22	66	42	35	35	38	192	755	504	124	62	83	194
23	64	50	35	*21	38	142	780	500	122	62	72	126
24	69	48	35	35	38	122	688	472	114	55	66	96
25	64	49	35	35	38	116	710	460	106	53	61	87
26	62	48	35	35	38	104	688	400	106	53	60	85
27	62	40	35	35	45	96	642	397	91	49	57	98
28	62	34	35	35	48	100	665	404	88	56	58	102
29	61	40	35	35	50	131	604	418	90	55	96	96
30	56	41	35	35	50	185	508	428	91	54	156	103
31	50	35	35	35	38	180	390	390	53	138		
Total	2290	1321	1031	1071	1131	4778	16453	15894	5449	2229	3559	2947
Mean.	73.9	44.0	33.3	34.5	39.0	154	548	513	182	71.9	115	98.2
Max.	102	52	45	35	50	248	805	358	140	449	194	
Min.	50	34	22	21	38	52	117	311	88	49	56	62
Acre-ft.	4540	2620	2040	2120	2240	9480	32630	31530	10810	4420	7060	5850

Total run-off for water year 1935-36 = 115,340 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Little Navajo River at Chromo, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	92	14	0.9	6.5
2	90	12	.7	5.8
3	97	16	.6	5.5
4	100	13	4.5	5.3
5	94	7.2	8.0	5.0
6	94	6.5	3.7	4.5
7	100	6.2	4.2	5.5
8	102	5.5	2.4	7.2
9	112	5.3	2.9	5.0
10	110	5.3	4.2	4.5
11	97	4.8	4.8	3.7
12	87	4.8	4.5	3.5
13	87	3.2	3.7	3.0
14	83	3.5	3.2	2.9
15	83	5.8	3.0	2.7
16	85	3.2	2.9	2.7
17	64	2.7	2.9	2.6
18	59	3.7	1.6	2.6
19	55	9.0	1.3	2.4
20	50	7.2	1.3	2.4
21	48	5.5	1.2	2.4
22	47	5.0	2.1	2.4
23	45	4.8	4.2	1.9
24	41	*4.5	5.0	2.2
25	35	*4.0	3.2	3.5
26	28	*3.5	18	10
27	26	2.7	8.0	30
28	104	19	2.7	6.5
29	*110	17	2.4	6.5
30	*120	17	1.2	7.2
31	100	1.2	9.0	.
Total	434	2064	176.4	137.0
Mean.	May 28	68.8	5.69	4.42
Max..	to 31	112	16	3.0
Min..	17	1.2	1.9
Acre-ft.	861	4090	350	272
Total run-off for period=5,896 acre-feet.												323

*Estimated.

Discharge of Little Navajo River at Chromo, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.8	2.7	2.0	2	2.5	3.0	12	62	13	0.2	0.3	2.5
2	5.8	3.0	2.0	2	2.5	5.0	22	62	11	0.2	0.3	1.4
3	5.8	3.0	2.0	2	2.5	7.0	17	64	8.6	0.2	1.0	3.0
4	5.8	2.4	2.1	2	2.5	10	9.5	60	6.1	0.1	7.0	2.8
5	5.5	1.5	1.9	2	2.5	15	12	59	3.9	0.1	17	2.5
6	5.3	1.8	1.8	2	2.5	20	14	53	2.2	0.1	9.3	1.9
7	5.3	1.9	2.4	2	2.5	25	21	49	1.5	0.1	5.8	1.6
8	5.3	2.7	2.1	2	2.5	30	42	46	1.2	0.1	3.1	1.5
9	4.5	2.6	2.8	2	2.5	35	57	45	0.8	0.1	2.6	1.9
10	4.8	2.4	3.4	2	2.5	40	68	40	0.7	0.2	1.9	1.5
11	4.2	1.9	4.0	2	2.5	35	99	35	0.7	0.3	1.9	3.0
12	4.5	1.9	2	2	2.5	35	131	32	0.7	0.3	2.0	2.6
13	4.0	1.9	2	2	2.5	45	156	31	0.6	0.2	2.4	2.0
14	3.5	1.8	2	2	2.5	53	179	31	0.6	0.2	1.8	1.9
15	3.5	1.4	2	2	2.5	32	179	30	0.6	0.2	1.5	1.5
16	3.2	1.9	2	2	2.5	24	166	33	0.6	0.2	1.3	1.4
17	3.0	1.9	2	2	2.5	18	158	34	0.6	0.2	1.4	1.3
18	3.0	1.9	2	2	2.5	17	146	32	0.6	0.2	1.2	1.4
19	3.5	1.3	2	2	2.5	18	134	31	0.5	0.2	1.3	1.6
20	5.3	1.5	2	2	2.5	19	134	30	0.5	0.3	3.3	2.0
21	4.2	1.6	2	2	2.5	15	125	30	0.5	0.3	3.0	1.6
22	3.5	1.9	2	*2	2.5	11	117	28	0.5	0.3	2.4	9.0
23	3.5	2.2	2	*2	2.5	7.7	108	26	0.5	0.2	2.4	4.8
24	3.4	1.9	2	2	2.5	11	97	26	0.3	0.2	1.3	3.1
25	3.4	2.2	2	2	2.5	6.6	92	24	0.3	0.2	1.2	2.6
26	3.4	2.1	2	2	2.5	6.5	81	20	0.3	0.1	1.0	3.0
27	3.3	1.5	2	2	2.5	9.6	77	17	0.3	0.2	1.0	3.7
28	3.3	1.8	2	2	2.5	7.3	73	13	0.3	0.3	1.2	4.2
29	3.3	1.8	2	2	2.5	13	64	12	0.3	0.3	1.6	3.9
30	3.2	1.8	2	2	2	16	58	12	0.2	0.3	3.5	5.5
31	3.2	2	2	*2	14	14	14	14	0.3	0.3	2.4	.
Total	129.3	60.2	66.5	63	72.5	603.7	2648.5	1081	58.5	6.4	87.4	80.7
Mean.	4.17	2.01	2.15	2.0	2.5	19.5	88.3	34.9	1.95	.21	2.82	2.69
Max..	5.8	3.0	4.0	...	...	53	179	64	13	0.3	1.7	9.0
Min..	3.0	1.5	1.8	...	...	3.0	9.5	12	.2	.1	0.3	1.3
Acre-ft.	256	119	132	125	144	1200	5250	2140	116	13	173	160

Total run-off for water year 1935-36=9,830 acre-feet.

*Discharge measurement.

Discharge of Pine or Los Pinos River Near Bayfield, Colorado, for Year Ending Sept. 30, 1935												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	153	70	53	....	....	....	170	400	1090	1440	544	370
2	148	77	57	....	....	....	185	356	1130	1320	562	331
3	139	70	52	....	....	....	219	347	1440	1350	451	304
4	131	69	51	....	....	....	221	350	1750	1290	497	286
5	124	71	50	....	....	....	216	313	2000	1200	518	267
6	115	70	50	....	....	....	200	341	2290	1150	466	251
7	111	71	50	....	....	....	189	370	2440	1160	447	304
8	107	72	44	....	....	....	196	393	2580	1110	489	366
9	104	71	46	....	....	....	189	458	2580	1080	470	316
10	101	71	50	....	....	....	166	505	2850	1100	440	278
11	100	70	....	....	....	....	164	594	3120	987	407	251
12	105	69	....	....	....	....	176	667	2840	906	393	233
13	101	68	....	....	....	....	207	749	2760	878	390	216
14	99	66	....	....	....	....	272	808	2850	846	341	205
15	95	65	....	....	....	....	363	754	3240	786	316	193
16	94	64	....	....	....	....	396	697	3020	702	400	187
17	90	70	....	....	....	....	421	667	2140	697	370	176
18	89	70	....	....	....	....	379	637	2230	672	328	174
19	86	69	....	....	....	....	376	618	2420	824	298	164
20	90	69	....	....	....	....	432	632	2660	760	267	160
21	89	68	....	....	....	....	458	652	2710	775	370	157
22	86	63	....	....	....	....	443	687	2470	862	347	176
23	84	61	....	....	....	....	440	813	2120	687	436	166
24	81	66	....	....	....	....	425	924	2320	584	738	214
25	79	56	....	....	....	....	353	1030	2060	518	570	298
26	79	58	....	....	....	....	339	1170	1960	478	518	322
27	77	53	....	....	....	....	376	1210	1900	447	514	353
28	77	61	....	....	....	....	418	1230	1700	514	451	386
29	75	58	....	....	....	....	436	1240	1580	594	410	421
30	71	53	....	....	....	....	443	1290	1570	526	436	366
31	69	....	....	....	....	....	1230	....	497	400	....	....
Total	3049	1989	1395	....	....	....	9267	22132	67820	26740	13584	7891
Mean.	98.4	66.3	45	40	50	110	309	714	2260	863	438	263
Max..	153	77	57	....	....	....	458	1290	3240	1440	738	421
Min..	69	53	....	....	....	....	164	313	1090	447	267	157
Ac-ft.	6050	3950	2770	2460	2780	6760	18380	43900	134500	53040	26940	15650

Total run-off for water year 1934-35=317,180 acre-feet.

Discharge of Pine or Los Pinos River Near Bayfield, Colorado, for Year Ending Sept. 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	306	125	82	....	....	66	98	949	1200	306	330	482
2	277	130	80	....	....	69	98	1210	988	270	382	396
3	249	119	76	....	....	75	112	1520	834	255	430	564
4	243	112	77	....	....	83	110	1850	742	252	430	632
5	231	100	85	....	....	89	102	2120	680	234	647	478
6	220	102	82	....	....	86	96	1940	718	217	965	408
7	206	104	74	....	....	86	109	1400	800	209	766	357
8	200	102	64	....	....	95	160	1120	905	200	618	313
9	198	100	71	....	....	109	192	905	938	212	520	233
10	192	101	64	....	....	128	223	829	954	274	423	264
11	184	89	66	....	....	123	299	848	927	609	375	296
12	178	93	71	....	....	126	427	1120	890	609	347	280
13	170	95	74	....	....	143	582	1220	864	423	337	264
14	165	92	55	....	....	155	752	1220	819	330	316	270
15	157	83	61	....	....	165	838	1310	718	323	280	246
16	155	86	72	....	....	165	954	1310	733	296	252	223
17	155	89	60	....	....	165	1090	1340	680	270	249	212
18	148	96	62	....	....	157	1150	1300	637	280	252	209
19	148	82	60	....	....	150	1070	1420	637	252	249	226
20	168	85	68	....	....	145	1020	1420	555	237	560	200
21	165	86	66	....	....	48	143	1050	1380	512	217	184
22	152	92	64	....	....	54	143	1160	1290	458	220	206
23	150	99	63	....	....	61	125	1220	1320	438	195	198
24	139	93	64	....	....	56	107	1050	1330	470	175	252
25	143	95	64	....	....	56	107	1080	1380	454	165	226
26	150	95	60	....	....	52	93	1110	1330	400	155	157
27	148	85	60	....	....	55	92	1090	1230	364	255	192
28	143	75	60	....	....	59	102	1100	1190	364	270	186
29	155	85	60	52	62	99	1140	1240	354	280	206	173
30	143	82	60	....	....	101	949	1380	350	386	783	186
31	126	....	60	....	....	109	....	1420	....	340	609	....
Total	5564	2872	2085	....	....	3601	20431	40841	20383	8716	12445	8396
Mean.	179	95.7	67.3	52	55	116	681	1320	679	281	401	280
Max..	306	130	85	....	....	165	1220	2120	1200	609	965	632
Min..	126	75	55	....	....	66	96	829	350	155	186	157
Ac.-ft.	11040	5700	4140	3200	3160	7140	40520	81010	40430	17290	24680	16650

Total run-off for water year 1935-36=254,960 acre feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Pine or Los Pinos River at Ignacio, Colorado, for Year Ending Sept. 30, 1935												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	27	9.2	35	50	73	90	390	615	1020	1040	114	188
2....	16	13	35	50	79	97	406	548	1020	917	166	179
3....	11	18	35	*50	79	122	467	528	1260	917	104	140
4....	*11	15	35	50	75	101	473	485	1550	830	99	124
5....	*10	16	35	50	75	97	428	491	1750	733	166	109
6....	9.7	13	*35	60	77	*90	375	491	2090	629	138	85
7....	9.7	13	35	43	79	85	336	485	2310	622	111	109
8....	9.7	13	35	45	79	92	444	491	2620	574	140	215
9....	9.2	9.7	35	46	79	83	560	554	2620	491	129	154
10....	9.2	11	35	46	79	88	350	622	2780	554	149	127
11....	8.8	11	35	46	77	81	318	725	3220	491	109	97
12....	*9.0	11	35	58	75	85	346	856	2860	433	99	75
13....	9.2	10	58	48	77	106	406	1050	2700	411	88	61
14....	*9.1	11	63	56	69	146	515	1090	2780	365	63	53
15....	*9.1	12	65	65	71	163	695	998	3220	341	38	43
16....	*9.0	11	61	67	*65	140	725	917	3130	267	43	33
17....	*9.0	13	60	65	*65	143	773	848	1880	225	81	30
18....	*8.9	13	56	60	*65	132	781	789	1880	222	54	27
19....	*8.9	13	61	60	75	143	822	757	2090	292	33	27
20....	8.8	15	65	60	79	135	789	864	2380	346	18	9.2
21....	7.8	15	69	*60	92	138	757	830	2460	288	22	6.1
22....	8.8	13	56	60	92	149	781	822	2310	422	36	6.1
23....	8.3	13	51	60	90	149	781	908	1750	310	69	8.3
24....	8.8	11	53	60	92	185	781	1030	2090	208	410	14
25....	8.3	10	56	60	*90	176	615	1140	1710	143	346	61
26....	8.3	10	61	70	*90	198	548	1280	1560	85	284	127
27....	8.3	11	58	70	*90	229	594	1300	1560	51	297	241
28....	7.8	10	54	70	90	229	650	1280	1350	69	236	305
29....	7.8	13	53	*70	....	263	665	1250	1140	138	188	305
30....	7.8	*15	46	70	....	328	680	1280	1190	127	222	248
31....	7.3	....	45	70	....	390	1160	....	85	233	....	....
Total	301.6	371.9	1511	1795	2218	4653	17251	26484	62280	12626	4285	3210
Mean	9.73	12.4	48.7	57.9	79.2	150	575	854	2076	407	138	107
Max.	27	18	69	70	92	390	822	1300	3220	1040	410	305
Min.	7.3	9.2	35	43	65	81	318	485	1020	51	18	6.1
Acre-ft.	598	738	3000	3560	4400	9230	34220	52530	123500	25040	8500	6370

Total run-off for water year 1934-35 = 271,700 acre-feet.

*Estimated.

Discharge of Pine or Los Pinos River at Ignacio, Colorado, for Year Ending Sept. 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	198	65	92	80	50	80	212	839	797	7.6	5.4	385
2....	169	69	90	70	70	93	189	1080	522	7.6	16	249
3....	149	67	88	85	50	110	245	1380	355	8.0	20	320
4....	135	61	94	75	50	142	212	1820	230	7.6	21	461
5....	119	56	99	85	75	192	195	2240	161	6.8	235	301
6....	101	54	104	85	90	223	180	2160	158	6.4	680	223
7....	85	56	92	80	90	219	209	1350	192	5.7	509	158
8....	73	60	79	85	90	276	323	899	280	5.7	318	139
9....	63	61	79	80	80	332	416	672	332	5.7	202	112
10....	58	60	79	75	70	355	406	567	355	11	100	93
11....	49	61	81	75	70	284	479	515	355	81	56	100
12....	43	60	83	75	75	280	650	733	332	185	36	104
13....	40	61	81	60	75	305	822	917	301	21	87	....
14....	35	63	80	70	75	310	980	873	241	11	19	82
15....	32	71	75	80	75	301	1040	953	176	8.4	16	70
16....	33	92	50	80	75	272	1140	944	164	8.4	25	53
17....	35	90	50	60	70	253	1320	1020	132	8.4	20	42
18....	35	99	60	50	70	241	1440	899	97	7.6	18	31
19....	36	94	70	40	75	234	1290	1020	70	5.7	17	27
20....	53	90	70	40	75	223	1250	1010	43	5.4	151	25
21....	67	94	80	50	73	216	1240	971	21	4.9	167	19
22....	46	94	75	50	66	237	1380	814	12	4.6	89	18
23....	40	101	73	60	68	212	1460	830	14	4.0	33	32
24....	53	106	73	60	76	161	1180	822	13	4.0	16	21
25....	39	106	73	70	68	176	1180	899	11	3.5	13	15
26....	42	109	79	70	60	150	1210	882	7.6	3.2	13	14
27....	42	99	79	70	66	137	1150	773	6.8	5.4	12	16
28....	45	88	75	75	71	170	1110	658	6.4	5.4	11	21
29....	69	83	81	75	75	206	1130	695	7.2	4.0	56	18
30....	73	92	70	70	....	209	908	864	8.0	4.0	553	16
31....	69	....	85	50	....	237	....	1070	....	4.9	587	....
Total	2126	2362	2439	2130	2073	6336	21946	31169	5400	461.9	4035.4	3252
Mean	68.6	78.7	78.7	68.7	71.5	221	832	1005	180	14.9	130	108
Max.	198	109	104	85	90	355	1460	2240	797	185	680	461
Min.	32	54	50	40	50	80	180	515	6.4	3.2	5.4	14
Acre-ft.	4220	4680	4840	4220	4110	13560	49480	61820	10710	916	8000	6450

Total run-off for water year 1935-36 = 173,000 acre-feet.

Discharge of Animas River at Howardsville, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	200	370	144	110	74
2	216	298	131	173	69
3	470	230	128	144	92
4	537	200	126	139	83
5	578	197	115	167	75
6	483	258	103	233	67
7	308	380	103	220	62
8	221	471	103	200	59
9	186	494	126	173	54
10	180	489	123	153	56
11	240	494	210	142	54
12	354	483	182	131	49
13	470	454	144	153	49
14	549	375	131	128	46
15	553	360	136	113	44
16	537	375	118	99	41
17	568	375	133	99	41
18	530	370	144	106	42
19	588	342	167	110	41
20	530	306	150	110	40
21	521	255	136	101	37
22	517	270	123	90	37
23	550	282	106	84	35
24	608	258	95	75	35
25	626	233	90	70	34
26	590	207	84	64	34
27	518	200	84	60	36
28	524	188	83	59	35
29	596	185	90	63	33
30	566	170	88	88	32
31	460	88	88	81	.
Total	14374	9569	3789	3738	1486
Mean.	464	319	122	121	49.5
Max.	626	494	210	233	92
Min.	180	170	83	59	32
Acre-ft.	28510	18980	7520	7410	2950

Total run-off for period=65,370 acre-feet.

Discharge of Animas River at Durango, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	227	145	152	138	156	167	488	807	1890	2420	792	667
2	213	152	144	149	156	163	495	691	1810	2310	702	600
3	208	161	137	144	158	171	582	661	2390	2250	647	536
4	203	159	137	142	159	169	582	596	2340	2100	695	494
5	198	159	133	149	163	167	547	575	3270	1950	738	476
6	194	159	135	150	167	154	514	691	3640	1770	717	448
7	190	156	135	147	171	154	475	760	4090	1760	660	465
8	181	156	138	145	169	163	482	863	4450	1770	815	647
9	177	158	141	147	159	154	469	960	4610	1670	807	536
10	175	156	140	147	159	159	413	994	4550	1940	753	500
11	175	159	150	149	158	163	389	1100	5090	1740	688	459
12	181	154	154	154	158	175	407	1260	4970	1680	674	410
13	183	152	156	142	159	196	488	1310	4570	1510	607	389
14	185	152	159	149	156	222	617	1330	5110	1500	549	378
15	177	152	163	161	158	257	807	1260	5730	1430	506	358
16	175	152	161	158	138	260	815	1300	5770	1320	660	334
17	175	159	154	132	145	257	847	1300	3950	1250	702	325
18	171	163	145	138	145	257	791	1240	3580	1190	710	320
19	163	161	145	130	145	257	744	1150	3900	1200	607	307
20	165	167	145	138	145	257	823	1180	4370	1250	536	298
21	163	167	150	130	145	247	817	1230	4630	1220	506	298
22	159	163	150	145	158	250	831	1310	4370	1180	530	298
23	158	161	147	149	145	250	823	1490	3700	1030	667	298
24	159	167	142	154	145	260	752	1770	3940	939	948	307
25	154	165	142	159	145	253	646	2080	3430	839	939	394
26	152	159	138	159	154	260	624	2290	3110	769	792	476
27	150	154	140	158	150	298	752	2330	3120	724	761	581
28	149	163	147	158	154	328	903	2290	2740	738	738	634
29	149	158	154	158	154	323	944	2270	2430	831	681	620
30	145	137	149	154	154	401	919	2390	2540	831	681	568
31	144	128	128	154	154	488	2330	800	800	738	.	.
Total	5398	4726	4521	4572	4307	7280	19816	41808	114690	43911	21546	13421
Mean.	174	158	146	147	154	235	661	1349	3823	1416	695	447
Max.	227	167	163	161	171	488	944	2390	5770	2420	948	667
Min.	141	137	133	130	138	154	389	575	1810	724	506	298
Acre-ft.	10710	9370	8970	9070	8540	14440	39300	82920	227500	87100	42740	26620

Total run-off for water year 1934-35=567,300 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Animas River at Durango, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	517	243	196	175	175	211	320	1620	2440	782	500	635
2....	487	251	193	156	180	221	302	2070	1930	700	550	548
3....	453	251	193	180	178	228	334	2720	1520	660	620	607
4....	430	247	196	164	154	243	339	3160	1320	630	620	902
5....	419	235	208	183	160	260	329	3460	1180	600	854	715
6....	393	232	201	171	171	256	302	3680	1290	565	1290	600
7....	372	239	191	178	178	247	307	2790	1560	535	1390	535
8....	358	239	183	191	167	256	362	2030	2040	500	1220	481
9....	339	239	183	162	160	289	499	1550	2230	475	1030	464
10....	325	243	178	183	160	339	580	1380	2280	535	838	441
11....	316	239	178	183	164	325	815	1570	2250	1190	745	469
12....	307	228	180	183	173	316	1150	2100	2230	1190	700	419
13....	302	232	188	167	167	339	1410	2540	2140	910	738	409
14....	298	235	180	178	160	353	1610	2490	1980	722	768	393
15....	294	228	162	178	162	372	1570	2620	1680	685	663	362
16....	289	225	162	173	162	372	1740	2660	1760	656	607	344
17....	285	225	154	171	162	383	1970	2830	1690	649	574	329
18....	276	235	156	152	158	377	2030	2730	1600	642	561	334
19....	276	225	160	162	158	358	1790	2660	1570	738	554	353
20....	307	215	169	162	162	358	1840	2960	1430	752	656	353
21....	298	211	169	183	169	358	1850	2860	1280	642	685	344
22....	285	208	171	185	164	383	2150	2690	1170	600	607	348
23....	285	218	169	180	167	362	2280	2800	1170	523	523	344
24....	285	215	175	183	180	325	2030	2690	1220	475	464	329
25....	276	218	171	180	154	320	2110	3010	1170	436	430	325
26....	268	218	164	180	154	302	2080	3060	1030	447	398	311
27....	272	211	169	180	160	285	2010	2840	942	441	362	325
28....	272	201	178	180	178	294	1980	2480	902	469	348	344
29....	268	196	160	180	191	294	2110	2630	870	453	353	334
30....	268	196	188	173	....	298	1740	3020	870	590	548	325
31....	251	....	180	164	....	320	....	2960	....	550	768	....
Total	10071	6798	5505	5420	4828	9644	39939	80660	46744	19742	20964	13022
Mean.	325	227	178	175	166	311	1330	2600	1560	637	676	434
Max.	517	251	208	191	191	383	2280	3680	2440	1190	1390	902
Min.	251	196	154	152	154	211	302	1380	870	436	348	311
Acre-ft.	19980	13480	10920	10750	9580	19130	79220	160000	92720	39160	41580	25830

Total run-off for water year 1935-36=522,350 acre-feet.

Discharge of Cement Creek Near Silverton, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	200	100	28	19	17
2....	215	73	25	33	17
3....	210	55	25	29	33
4....	184	49	25	32	23
5....	215	54	24	42	20
6....	115	70	22	50	19
7....	80	97	22	44	17
8....	36	106	23	28	16
9....	23	113	22	22	16
10....	21	113	24	24	18
11....	44	110	46	25	16
12....	96	122	34	21	15
13....	68	110	25	28	15
14....	96	91	23	24	12
15....	89	82	26	23	12
16....	96	87	26	22	12
17....	111	89	24	19	12
18....	126	91	113	30	12
19....	107	82	40	35	11
20....	119	73	38	27	10
21....	111	59	36	28	9.8
22....	111	52	34	30	10
23....	100	51	32	26	10
24....	138	54	28	23	9.8
25....	162	50	32	16	9.2
26....	170	44	27	16	9.8
27....	152	44	25	15	9.2
28....	137	43	27	17	8.0
29....	162	41	27	18	10
30....	162	35	18	23	11
31....	137	....	11	18	....
Total	3793	2240	935	807	419.8
Mean.	122	747	30.2	26	14.0
Max.	215	122	113	50	33
Min.	21	35	14	15	8.0
Acre-ft.	7520	4440	1850	1600	833

Total run-off for period=16,240 acre-feet.

Discharge of Mineral Creek Near Silverton, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	289	114	82	70
2	218	104	108	67
3	168	99	127	114
4	148	91	125	101
5	151	90	180	85
6	194	95	278	76
7	278	91	206	69
8	362	90	164	63
9	411	91	130	59
10	424	108	119	66
11	430	268	106	70
12	430	156	95	64
13	398	121	144	58
14	350	108	116	55
15	327	104	101	50
16	332	104	95	49
17	327	114	95	48
18	316	130	91	49
19	294	153	91	49
20	259	132	95	46
21	230	112	90	44
22	218	97	79	43
23	214	88	71	42
24	230	83	64	42
25	198	95	59	39
26	489	177	93	55
27	380	168	88	42
28	356	158	88	39
29	469	156	88	34
30	463	139	87	33
31	380	80	74	.
Total	2537	7994	3362	3281
Mean.	May 26	266	108	106
Max..	to 31	430	268	278
Min...	139	80	51	33
Acre-ft.	5030	15860	6670	6510
												3380

Total run-off for period = 37,450 acre-feet.

Discharge of Cascade Creek Near Tacoma, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.9	6.1	5.1	4.2	4.2	5.1	8.2	33	83	188	44	22
2	7.9	6.1	5.1	4.2	4.2	5.1	9.3	29	103	183	36	18
3	7.9	6.1	5.1	4.2	4.2	5.1	13	25	160	166	26	18
4	7.9	6.1	5.1	4.2	4.2	5.1	9.9	22	206	164	31	26
5	7.3	8.2	5.1	4.2	4.2	5.1	9.9	23	212	157	36	22
6	6.7	7.1	5.1	4.2	4.2	5.1	8.8	23	271	137	47	22
7	6.7	9.3	5.1	4.2	4.2	5.1	8.2	16	327	137	54	49
8	9.3	9.3	5.1	4.2	4.2	5.1	8.2	18	334	137	44	36
9	9.3	9.3	5.1	4.2	4.2	5.1	7.7	19	293	137	44	26
10	9.3	8.2	5.1	4.2	4.2	5.1	7.1	22	372	154	34	20
11	8.2	8.2	5.1	4.2	4.2	5.1	7.7	27	380	137	36	18
12	8.2	8.2	5.1	4.2	4.2	5.1	9.4	28	375	145	30	15
13	8.2	8.2	5.1	4.2	4.2	5.1	12	28	429	115	22	15
14	8.8	7.1	5.1	4.2	4.2	5.1	14	27	525	115	20	15
15	8.2	7.1	5.1	4.2	4.2	5.1	17	27	518	115	20	14
16	8.3	7.1	5.1	4.2	4.2	5.1	21	28	499	95	24	14
17	8.2	7.1	5.1	4.2	4.2	5.1	21	26	269	95	39	12
18	8.2	6.1	5.1	4.2	4.2	5.1	20	26	337	83	24	13
19	8.2	6.1	5.1	4.2	4.2	5.1	20	26	364	100	24	12
20	8.2	6.1	5.1	4.2	4.2	5.1	20	26	435	95	24	13
21	8.2	7.1	5.1	4.2	4.2	5.1	20	27	543	95	24	12
22	8.2	7.1	5.1	4.2	4.2	5.1	22	32	354	77	22	13
23	8.2	7.1	5.1	4.2	4.2	5.1	21	42	326	65	28	12
24	8.2	6.1	5.1	4.2	4.2	5.1	20	55	295	53	40	17
25	8.2	6.1	5.1	4.2	4.2	5.1	20	71	259	47	40	24
26	8.2	6.1	5.1	4.2	4.2	5.1	21	96	244	45	40	36
27	7.1	6.1	5.1	4.2	4.2	5.1	27	109	248	43	38	36
28	7.1	5.1	5.1	4.2	4.2	5.1	34	109	216	39	33	36
29	7.1	5.1	5.1	4.2	4.2	6.1	36	113	198	41	30	31
30	6.1	5.1	5.1	4.2	4.2	7.1	35	115	180	41	45	31
31	6.1	5.1	5.1	4.2	4.2	8.2	107	107	72	54	.	.
Total	245.6	208.1	158.1	130.2	117.6	164.2	508.4	1375	9355	3273	1053	648
Mean.	7.9	6.93	5.1	4.2	4.2	5.3	16.9	44.4	312	106	34.0	21.6
Max..	9.3	9.3	5.1	4.2	4.2	8.2	36	115	543	188	54	49
Min...	6.1	5.1	5.1	4.2	4.2	5.1	7.1	16	83	39	20	12
Acre-ft.	487	413	314	258	233	326	1010	2730	18560	6490	2090	1290

Total run-off for water year 1934-35 = 34,200 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Cascade Creek Near Tacoma, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	28	9.3	6.1	4.2	4.2	4.2	94	174	39	20	36	
2....	26	9.3	5.1	4.2	4.2	4.2	172	120	33	23	38	
3....	26	8.2	5.1	4.2	4.2	4.2	230	114	31	42	112	
4....	24	8.2	5.1	4.2	4.2	4.2	185	99	31	36	43	
5....	22	8.2	5.1	4.2	4.2	4.2	215	114	31	73	42	
6....	20	8.2	5.1	4.2	4.2	4.2	153	125	31	119	39	
7....	18	7.1	5.1	4.2	4.2	4.2	126	153	28	128	33	
8....	18	7.1	5.1	4.2	4.2	4.2	105	190	26	88	33	
9....	15	7.1	5.1	4.2	4.2	4.2	85	209	26	56	31	
10....	15	7.1	5.1	4.2	4.2	4.2	101	181	26	66	31	
11....	14	7.1	5.1	4.2	4.2	4.2	10	142	184	144	61	
12....	12	7.1	5.1	4.2	4.2	4.2	17	181	176	86	89	
13....	11	7.1	5.1	4.2	4.2	4.2	26	200	137	50	86	
14....	11	7.1	5.1	4.2	4.2	4.2	31	191	132	47	48	
15....	11	7.1	5.1	4.2	4.2	4.2	38	168	115	42	47	
16....	11	7.1	5.1	4.2	4.2	4.2	65	180	96	42	50	
17....	10	6.1	5.1	4.2	4.2	4.2	68	191	110	39	44	
18....	9.0	6.1	5.1	4.2	4.2	4.2	57	195	105	48	44	
19....	17	6.1	5.1	4.2	4.2	4.2	34	214	107	42	18	
20....	16	6.1	5.1	4.2	4.2	4.2	29	241	83	39	53	
21....	16	6.1	5.1	4.2	4.2	4.2	24	246	77	31	42	
22....	14	6.1	5.1	4.2	4.2	4.2	48	270	72	26	42	
23....	12	6.1	5.1	4.2	4.2	4.2	66	259	71	24	31	
24....	12	6.1	5.1	4.2	4.2	4.2	63	268	83	20	26	
25....	12	6.1	5.1	4.2	4.2	4.2	66	257	69	20	25	
26....	12	6.1	4.2	4.2	4.2	4.2	82	240	60	20	23	
27....	10	6.1	4.2	4.2	4.2	4.2	95	177	60	20	21	
28....	14	6.1	4.2	4.2	4.2	4.2	97	175	56	20	27	
29....	14	6.1	4.2	4.2	4.2	4.2	96	227	47	18	31	
30....	12	6.1	4.2	4.2	4.2	5.1	80	233	47	18	53	
31....	9.3	4.2	4.2	4.2	4.2	4.2	4.2	234	20	44	..	
Total	471.3	207.8	153.7	130.2	121.8	131.1	1141.0	5955	3366	1118	1582	\$21
Mean.	15.2	6.93	4.96	4.20	4.20	4.23	38.0	192	112	36.1	51.0	27.4
Max..	28	9.3	6.1	4.2	4.2	5.1	97	270	209	144	128	112
Min..	9.0	6.1	4.2	4.2	4.2	4.2	4.2	85	47	18	20	14
Acre-ft.	935	412	305	258	242	260	2260	11810	6680	2220	3140	1630

Total run-off for water year 1935-36=30,150 acre-feet.

Discharge of Lightner Creek Near Durango, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	1	2	....	....	....	4	168	95	74	18	6	6
2....	1	2	....	....	....	5	189	80	74	16	5	6
3....	1	2	....	....	....	6	210	69	105	18	5	6
4....	1	2	....	....	....	7	210	83	102	18	4	7
5....	1	2	....	....	....	8	168	97	108	18	4	6
6....	1	2	....	....	....	9	150	95	108	18	4	6
7....	1	2	....	....	....	9	117	95	105	18	4	10
8....	1	2	....	....	....	9	132	105	92	13	5	7
9....	1	2	....	....	....	9	132	105	80	11	3	6
10....	1	2	....	....	....	9	102	114	74	9	6	6
11....	1	2	....	....	....	10	102	117	90	9	5	5
12....	3	2	....	....	....	10	132	117	90	9	5	5
13....	2	2	....	....	....	10	233	117	90	9	6	5
14....	1	2	....	....	....	10	251	114	100	10	6	5
15....	1	2	....	....	....	10	206	120	100	8	4	5
16....	1	1	....	....	....	11	181	108	80	6	16	5
17....	1	1	....	....	....	11	157	97	56	5	10	6
18....	1	1	....	....	....	12	157	92	45	4	8	4
19....	1	1	....	....	....	12	154	78	35	4	6	4
20....	1	1	....	....	....	13	150	111	27	5	5	4
21....	1	1	....	....	....	14	150	111	26	8	5	4
22....	1	1	....	....	....	16	146	111	22	8	10	5
23....	2	1	....	....	....	19	143	105	25	5	10	5
24....	2	1	....	....	....	19	126	117	19	5	17	6
25....	3	1	....	....	....	20	108	117	16	4	6	8
26....	2	1	....	....	....	46	105	117	14	3	6	8
27....	2	1	....	....	....	69	117	117	15	3	6	21
28....	2	1	....	....	....	73	117	114	16	2	6	8
29....	2	1	....	....	....	102	114	114	17	2	4	7
30....	2	1	....	....	....	150	111	108	18	3	5	6
31....	2	....	....	....	....	256	92	4	7	4	4	3
Total	44	45	31	31	56	973	4538	3232	1823	273	204	193
Mean.	1.42	1.5	1.0	1.0	2.0	31.4	151	104	60.8	8.81	6.58	6.43
Max..	3	....	....	....	....	256	251	120	108	18	17	21
Min..	1	....	....	....	....	4	102	69	14	2	4	4
Acre-ft.	87	89	61	61	111	1930	9000	6410	3620	541	405	383

Total run-off for water year 1934-35=22,698 acre-feet.

Discharge of Lightner Creek Near Durango, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.6	4.1	3.9	.....	.....	5.4	46	69	22	4.7	1.4	9.6
2	5.9	4.6	3.5	.....	.....	11	54	76	19	4.4	1.9	7.8
3	5.0	4.6	.....	.....	.....	22	56	83	17	4.4	2.9	19
4	5.6	4.3	.....	.....	.....	35	49	93	16	3.3	5.8	16
5	4.8	4.1	.....	.....	.....	40	40	93	15	3.6	14	13
6	4.6	4.6	.....	.....	.....	46	35	93	14	3.3	14	10
7	3.9	4.6	.....	.....	.....	43	50	81	11	3.3	10	9.0
8	3.9	4.6	.....	.....	.....	46	80	60	11	2.2	10	7.0
9	3.7	4.6	.....	.....	.....	54	105	47	11	2.2	7.9	6.0
10	3.7	4.6	.....	.....	.....	54	147	40	11	2.2	7.1	5.6
11	3.5	4.1	.....	.....	.....	40	273	37	11	4.4	6.6	5.6
12	3.5	4.1	.....	.....	.....	40	350	40	10	2.9	7.1	5.6
13	3.5	4.6	.....	.....	.....	46	191	40	9.6	2.2	6.6	5.6
14	3.5	4.6	.....	.....	.....	46	191	43	9.2	1.9	5.8	5.2
15	3.5	4.1	.....	.....	.....	54	146	48	9.2	1.9	5.8	5.0
16	3.5	4.1	.....	.....	.....	54	125	55	8.7	1.7	5.8	4.8
17	3.5	3.9	.....	.....	.....	54	125	51	8.3	1.6	5.8	4.6
18	3.5	3.9	.....	.....	.....	46	125	48	7.9	1.4	5.8	4.8
19	4.6	4.1	.....	.....	.....	46	109	48	7.5	1.4	8.3	4.8
20	4.6	4.6	.....	.....	.....	43	109	45	7.5	1.4	9.2	5.0
21	3.5	4.6	.....	.....	.....	46	109	41	7.5	1.1	6.6	5.0
22	3.5	4.1	.....	.....	.....	46	119	38	7.5	1.2	5.8	5.6
23	3.9	4.1	.....	.....	.....	40	109	37	7.5	1.4	5.1	6.6
24	4.0	3.9	* 4.0	.....	.....	30	93	35	7.5	1.4	5.0	5.9
25	4.0	3.5	.....	.....	.....	26	103	34	7.5	1.4	4.7	5.6
26	4.2	4.6	.....	.....	.....	26	93	34	8.3	1.4	2.9	6.2
27	4.3	4.1	.....	.....	.....	22	88	34	7.9	1.4	1.7	7.8
28	4.4	4.1	.....	.....	.....	3.7	30	93	33	7.9	1.4	7.2
29	4.6	4.1	.....	.....	.....	3.7	40	93	29	7.1	1.2	5.6
30	4.6	4.1	.....	.....	.....	46	74	26	6.6	1.4	7.0	5.6
31	4.1	.....	.....	.....	.....	54	27	11	1.4	16	16	16
Total	129.0	128.0	.....	.....	1231.4	3380	1558	311.2	69.1	267.3	215.1	
Mean..	4.16	4.27	3.0	2.0	3.0	39.7	113	50.3	10.4	2.23	8.62	7.17
Max..	5.9	4.6	.....	.....	.....	54	350	93	22	4.7	7.0	19
Min..	3.5	3.5	.....	.....	.....	5.4	35	26	6.6	1.1	1.4	4.6
Acre-ft.	256	254	184	123	173	2440	6700	3090	617	137	530	427

Total run-off for water year 1935-36=14,931 acre-feet.

Discharge of Florida River Near Durango, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	10	7	94	189	322	495	102	141
2	42	12	9	102	164	334	470	112	117
3	39	11	9	112	153	424	432	89	99
4	35	10	7	109	136	530	368	89	89
5	29	12	9	99	125	635	341	102	78
6	25	11	11	85	138	726	308	92	68
7	23	10	6	78	141	800	322	83	96
8	22	10	5	81	144	838	268	122	114
9	21	10	* 9	6	83	156	838	254	109	89
10	22	10	7	70	170	906	265	144	81
11	22	11	5	70	208	916	221	117	74
12	26	10	5	85	231	877	201	102	59
13	30	10	6	112	258	901	167	89	50
14	24	10	10	144	265	916	186	78	50
15	24	9	16	158	282	1120	161	66	44
16	23	8	.....	.....	102	176	293	1030	144	136	39
17	21	13	.....	.....	78	195	286	754	144	119	37
18	20	12	.....	.....	18	173	279	814	156	92	36
19	19	10	.....	.....	19	176	272	887	224	74	34
20	19	10	.....	.....	21	218	258	993	192	76	31
21	16	10	.....	.....	31	214	258	1010	170	117	31
22	14	8	.....	.....	22	204	290	833	147	117	32
23	13	19	.....	.....	22	204	282	791	128	237	32
24	13	11	.....	.....	22	186	279	824	109	388	42
25	11	21	.....	.....	18	156	326	726	85	258	76
26	10	8	.....	.....	28	158	349	689	74	231	94
27	10	10	.....	.....	39	179	353	671	64	218	109
28	10	10	.....	.....	46	195	345	556	63	182	130
29	11	10	.....	.....	54	195	349	577	83	153	153
30	10	9	.....	.....	72	195	368	581	99	161	133
31	10	.....	.....	.....	85	...	364	...	94	164	...
Total	657	325	.....	.....	795	4306	7711	22819	6435	4219	2258
Mean..	21.2	10.8	9.0	7.0	7.0	25.6	144	249	761	208	136	75.3
Max..	43	21	.....	.....	102	218	368	1120	495	388	153
Min..	10	8	.....	.....	5	70	125	322	63	66	31
Acre-ft.	1300	645	553	430	389	1580	8540	15290	45260	12760	8370	4480

Total run-off for water year 1934-35=99,597 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Florida River Near Durango, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	117	23	...	...	...	6	38	325	388	62	44	135
2	103	29	...	...	...	7	34	426	309	56	73	110
3	86	27	...	...	...	9	43	554	292	52	125	161
4	76	21	...	...	...	12	40	666	271	50	153	173
5	67	21	...	...	...	16	37	681	255	44	234	135
6	59	28	...	...	...	20	34	589	244	39	252	108
7	56	19	...	...	...	24	46	466	263	39	201	92
8	49	19	...	...	...	27	77	346	313	39	188	78
9	46	20	...	...	...	27	92	321	309	42	155	71
10	45	17	...	...	...	32	105	317	296	55	117	67
11	43	16	...	...	...	35	140	346	276	122	101	69
12	43	16	...	...	...	34	160	453	241	122	92	70
13	39	16	...	...	...	38	185	466	220	86	96	63
14	35	14	...	...	...	43	205	409	194	69	84	66
15	37	17	...	...	...	46	220	414	173	62	74	57
16	37	19	...	...	...	46	220	440	164	58	67	51
17	33	14	...	...	...	47	241	484	150	55	63	51
18	29	14	...	...	...	50	255	462	135	52	71	51
19	32	17	...	...	...	51	248	501	121	47	77	55
20	39	26	...	...	...	51	276	510	105	41	173	50
21	35	20	...	...	...	52	276	506	99	39	123	45
22	32	19	...	...	...	55	284	488	92	44	96	49
23	32	14	...	...	...	46	271	519	84	35	83	50
24	31	10	...	...	...	38	241	528	96	29	71	45
25	29	12	...	...	...	38	252	479	89	26	66	41
26	33	13	*8.3	...	...	34	284	462	78	27	59	40
27	34	11	...	...	...	35	296	414	73	33	55	41
28	31	22	...	...	...	34	317	359	67	35	51	41
29	34	15	...	...	*6	28	334	401	63	43	57	43
30	33	15	...	...	...	31	317	453	66	46	217	49
31	25	...	...	...	...	37	...	492	...	44	188	...
Total	1420	544	...	...	...	1049	5568	14277	5526	1593	3506	2157
Mean.	45.8	18.1	10	7.0	7.2	33.8	186	461	184	51.4	113	71.9
Max..	117	29	...	...	...	55	334	681	388	122	252	173
Min..	25	10	...	...	...	34	317	63	26	44	40	
Acre-ft.	2820	1080	615	430	414	2080	11040	28320	10960	3160	6950	4280

Total run-off for water year 1935-36=72,149 acre-feet.

Discharge of La Plata River at Hesperus, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	5	...	...	...	*10	54	150	218	112	26	21
2	9	5	...	...	...	9	72	130	218	125	24	21
3	9	4	...	...	...	9	88	118	297	121	23	20
4	8	4	...	...	...	*9	9	83	102	326	100	20
5	7	4	...	...	...	9	75	100	345	83	21	19
6	7	4	...	...	...	9	70	97	383	83	20	18
7	6	4	...	...	...	9	64	102	417	100	18	18
8	7	4	...	...	...	9	57	105	417	91	17	16
9	7	4	...	...	...	9	49	121	378	96	18	16
10	7	4	...	...	...	9	43	127	394	91	16	15
11	7	4	...	...	...	16	43	147	417	57	15	14
12	7	4	...	...	...	16	49	147	383	36	15	14
13	8	5	...	...	...	16	59	147	405	41	14	14
14	7	4	...	...	...	16	97	147	423	34	14	14
15	7	4	...	...	...	16	124	130	405	28	17	13
16	7	5	...	...	...	13	130	127	297	24	21	13
17	7	6	*4	*7	...	13	127	124	202	23	20	13
18	7	5	...	...	...	13	118	111	194	23	19	12
19	7	4	...	...	...	13	102	111	194	36	18	12
20	7	4	...	...	...	13	111	114	218	24	18	12
21	7	4	...	...	...	16	118	108	218	35	18	10
22	7	4	...	...	...	16	118	111	194	50	18	10
23	6	4	...	...	...	16	118	127	204	41	18	10
24	5	4	...	...	...	16	108	164	213	42	21	10
25	5	4	...	...	...	16	94	210	188	38	20	10
26	5	4	...	...	...	16	97	239	188	35	22	9
27	5	4	...	...	...	16	124	252	164	30	26	10
28	5	4	...	...	...	16	164	239	149	35	25	10
29	5	4	...	...	...	*17	171	261	125	36	24	10
30	5	4	...	...	...	23	150	248	121	36	23	11
31	4	...	...	...	...	30	...	218	...	32	22	...
Total	206	127	...	...	...	434	2877	4634	8295	1741	614	415
Mean.	6.65	4.23	5	4	9	14	95.9	149	276	56.2	19.8	13.8
Max..	9	6	...	...	...	30	171	261	423	125	26	21
Min..	4	4	...	...	...	9	43	97	121	23	14	9
Acre-ft.	409	252	307	430	500	861	5710	9190	16450	3450	1220	823

Total run-off for water year 1934-35=39,600 acre-feet.

*Discharge measurement.

Discharge of La Plata River at Hesperus, Colorado, for Year Ending Sept. 30, 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	14	5.4	....	....	....	7.0	33	223	94	19	22	55
2....	15	5.4	....	....	....	7.0	43	256	71	18	28	46
3....	16	5.4	....	....	....	8.0	39	245	43	19	65	48
4....	16	5.0	....	....	....	8.0	34	223	36	21	65	46
5....	15	5.0	....	....	....	9.0	36	315	36	19	71	43
6....	15	7.4	....	....	....	9.0	43	270	46	18	60	39
7....	15	7.0	....	....	....	10	37	220	58	17	53	32
8....	15	7.0	....	....	....	10	52	116	65	17	43	28
9....	15	7.0	....	....	....	11	64	104	60	17	34	23
10....	15	7.0	....	....	....	12	80	100	58	17	27	22
11....	15	5.4	....	....	....	16	91	130	58	30	23	19
12....	14	5.8	....	....	....	16	152	173	58	25	23	18
13....	12	5.8	....	....	....	18	256	188	71	17	22	17
14....	12	5.7	....	....	....	20	298	177	82	11	19	16
15....	10	5.7	....	....	....	20	250	196	80	11	16	13
16....	9.0	5.0	....	....	....	23	252	229	77	9.6	17	13
17....	9.0	5	....	....	....	27	254	196	71	9.6	25	12
18....	9.0	5	....	*4.5	....	31	230	212	65	12	28	12
19....	9.0	5	....	....	....	41	223	216	60	15	23	13
20....	9.5	5	....	....	....	45	227	192	58	16	43	12
21....	9.0	5	....	....	....	50	241	184	55	15	48	9.6
22....	8.2	5	....	....	....	48	241	180	48	15	46	13
23....	7.4	5	....	....	....	43	232	180	46	13	39	15
24....	7.0	5	*4.4	....	....	46	223	165	23	13	36	11
25....	6.6	5	....	....	....	43	223	173	18	12	30	10
26....	6.6	5	....	....	....	46	230	161	18	12	25	9.6
27....	7.4	5	....	*6.8	....	41	230	136	23	15	19	10
28....	9.0	5	....	....	....	39	230	133	23	16	18	11
29....	8.2	5	....	....	....	37	245	120	23	19	28	10
30....	6.6	5	....	....	....	40	217	133	22	28	94	9.6
31....	5.8	....	....	....	....	35	....	130	....	22	82	....
Total	341.3	165	....	....	....	816	5006	5676	1556	518.2	1172	635.8
Mean.	11.0	5.5	4.4	4.5	6.0	26.3	167	183	51.9	16.7	37.8	21.2
Max.	16	7.4	....	....	....	50	298	315	94	30	94	55
Min.	5.8	5.0	....	....	....	7	33	100	18	9.6	16	9.6
Acre-ft.	677	327	271	277	345	1620	9930	11260	3090	1030	2320	1260

Total run-off for water year 1935-36 = 32,407 acre-feet.

Discharge of La Plata River at Colorado-New Mexico State Line for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	0	0	....	....	24	9	97	41	67	77	7	7
2....	0	0	....	....	17	12	123	37	58	92	1	5
3....	0	0	....	....	15	17	138	42	102	96	0	5
4....	0	0	....	....	15	15	144	42	173	87	0	4
5....	0	0	....	....	13	13	112	56	176	73	22	4
6....	0	0	....	....	14	10	81	49	246	62	16	4
7....	0	0	....	....	20	9	60	42	221	70	7	2
8....	0	0	....	....	13	10	56	37	195	64	1	2
9....	0	0	....	....	12	9	70	37	207	64	44	2
10....	0	0	....	....	10	10	53	44	174	80	4	0
11....	0	0	....	....	10	9	41	45	233	45	5	0
12....	0	0	....	....	9	9	38	50	217	10	5	0
13....	1	0	....	....	9	13	38	57	178	1	1	0
14....	0	0	....	....	9	22	61	62	213	1	2	0
15....	2	0	....	....	9	27	111	72	246	1	6	0
16....	0	0	....	....	9	17	89	60	211	0	53	0
17....	0	0	*6	....	9	20	102	59	88	0	6	0
18....	0	0	....	*4	10	18	93	55	52	1	5	1
19....	0	0	....	....	9	24	93	51	43	2	5	2
20....	0	0	....	....	9	17	83	86	54	22	5	1
21....	0	0	....	....	9	17	83	81	60	11	5	0
22....	0	0	....	....	12	20	77	70	45	20	5	0
23....	0	0	....	....	12	22	76	62	31	36	5	1
24....	0	3	....	....	12	20	66	62	33	35	7	31
25....	0	5	....	....	9	20	52	70	28	32	6	19
26....	0	6	....	....	9	26	41	109	32	28	6	7
27....	0	8	....	....	9	37	39	119	39	24	5	78
28....	0	6	....	....	9	39	44	122	58	24	5	10
29....	0	6	....	....	....	44	49	130	55	25	5	2
30....	0	6	....	....	....	52	49	138	87	29	5	2
31....	0	....	....	....	....	80	....	109	....	28	7	....
Total	3	40	....	....	326	667	2259	2096	3622	1140	256	189
Mean.	0.10	1.33	....	6	11.6	21.5	75.3	67.6	121	36.8	8.26	6.30
Max.	2	8	....	....	24	80	144	138	246	96	53	78
Min.	0	0	....	....	9	9	38	37	28	0	0	0
Acre-ft.	6	79	369	369	647	1320	4480	4160	7180	2260	508	375

Total run-off for water year 1934-35 = 21,753 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

**Discharge of La Plata River at Colorado-New Mexico State Line for Year
Ending Sept. 30, 1936**

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	6.3	12	11	...	8.0	92	52	50	53	0	3.1	39
2....	5.2	12	9.9	...	8.0	106	47	40	53	0	101	51
3....	6.3	12	9.9	...	10.0	108	61	83	27	0	27	60
4....	6.9	12	10	...	10.0	99	59	123	3.0	3.6	27	18
5....	7.5	11	13	...	12	86	50	152	2.8	3.6	25	12
6....	7.5	10	14	...	12	122	44	154	0	3.6	76	12
7....	6.9	10	14	...	12	153	43	104	0	3.6	39	10
8....	8.1	10	9.9	...	12	167	60	56	0	3.2	20	9.6
9....	7.5	11	10	...	12	173	90	32	0	1.9	17	8.8
10....	7.5	12	10	...	11	145	107	21	0	1.7	16	8.4
11....	7.2	12	11	...	9.9	106	131	19	0	3.6	10	9.6
12....	9.0	11	13	...	12	79	195	13	0	2.8	6.8	8.8
13....	9.3	12	12	...	13	89	299	8.4	0	2.2	6.0	8.4
14....	9.3	12	13	...	13	82	345	7.2	36	2.2	4.0	8.0
15....	9.9	12	12	...	12	73	392	24	56	2.2	5.2	8.8
16....	9.9	12	8.0	...	11	56	272	66	56	2.2	4.0	8.0
17....	10	13	7.0	...	12	50	262	100	50	1.8	2.4	6.0
18....	10	15	6.0	*2.1	12	42	209	94	45	2.4	4.6	6.4
19....	11	13	6.0	...	12	42	193	82	42	2.4	14	8.4
20....	14	12	6.0	...	12	43	169	66	39	2.4	10	8.0
21....	13	12	6.0	...	11	42	154	64	36	2.0	6.8	10
22....	12	12	6.0	...	13	44	167	55	33	2.0	5.0	12
23....	14	11	5.3	...	14	43	144	62	29	1.2	3.4	14
24....	16	10	5.0	...	20	31	126	61	18	0.2	3.8	12
25....	15	10	5.0	...	16	39	126	60	6.0	2.4	3.4	9.6
26....	14	10	5.0	...	12	33	156	58	2.0	2.6	3.4	9.2
27....	15	10	5.0	*8.0	14	37	135	58	0	2.0	3.0	12
28....	16	11	5.0	...	30	40	113	55	0	0.4	43	15
29....	14	11	5.0	...	64	41	102	53	0	1.5	49	15
30....	13	11	5.0	...	...	48	80	67	0	3.0	462	14
31....	12	...	5.0	...	...	66	...	79	...	0.5	50	..
Total	323.3	344	263	248	419.9	2377	4383	1966.6	568.8	63.2	1050.9	432
Mean.	10.4	11.5	8.48	8.0	14.5	76.7	146	63.4	19.6	2.04	33.9	14.4
Max..	16	15	14	...	64	173	392	154	56	3.6	462	60
Min..	5.2	10	5.0	...	8.0	31	43	7.2	0	0	2.4	6.0
Acre-ft.	641	682	522	492	833	4710	8690	3900	1160	125	2080	857

Total run-off for water year 1935-36=24,690 acre-feet.

Discharge of Cherry Creek Near Red Mesa, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	0	0	0	0	0	3	55	41	41	6	2	2
2....	0	0	0	0	0	4	54	32	37	6	1	2
3....	0	0	0	0	0	5	55	37	39	6	1	2
4....	0	0	0	0	0	4	52	37	42	6	1	2
5....	0	0	0	0	0	4	39	50	37	6	1	2
6....	0	0	0	0	0	3	36	45	32	6	1	2
7....	0	0	0	0	0	3	36	37	23	6	1	2
8....	0	0	0	0	0	3	33	34	18	6	1	2
9....	0	0	0	0	0	3	33	34	16	6	1	2
10....	0	0	0	0	0	3	29	41	8	6	1	1
11....	0	0	0	0	0	3	27	41	4	2	1	1
12....	0	0	0	0	0	3	27	47	4	1	1	1
13....	0	0	0	0	0	4	30	50	3	1	1	1
14....	0	0	0	0	0	7	41	50	2	1	1	1
15....	0	0	0	0	0	8	58	50	2	1	1	1
16....	0	0	0	0	0	5	50	50	2	1	1	1
17....	0	0	0	0	0	6	58	48	2	2	1	1
18....	0	0	0	0	0	5	45	43	2	3	1	1
19....	0	0	0	0	0	7	54	39	2	2	1	1
20....	0	0	0	0	0	5	58	50	2	2	1	1
21....	0	0	0	0	0	5	58	63	2	3	1	1
22....	0	0	0	0	0	6	58	57	2	3	1	1
23....	0	0	0	0	0	7	58	50	2	4	1	1
24....	0	0	0	0	0	6	50	50	2	4	2	1
25....	0	0	0	0	0	6	45	54	2	4	3	1
26....	0	0	0	0	0	8	37	61	1	3	2	1
27....	0	0	0	0	0	11	41	60	1	3	2	1
28....	0	0	0	0	0	22	50	58	1	3	2	1
29....	0	0	0	0	0	28	50	58	5	3	2	1
30....	0	0	0	0	0	43	50	57	6	4	2	1
31....	0	...	0	0	0	56	...	46	3	3	..	..
Total	0	0	0	0	56	286	1367	1470	342	113	42	39
Mean.	0	0	0	0	2	9.2	45.6	47.4	11.4	3.65	1.35	1.30
Max..	0	0	0	0	56	58	63	42	6	3	2	2
Min..	0	0	0	0	3	27	32	1	1	1	1	1
Acre-ft.	....	....	....	....	111	567	2710	2920	678	224	83	77

Total run-off for water year 1934-35=7,370 acre-feet.

*Discharge measurement.

Discharge of Cherry Creek Near Red Mesa, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8					10	16	31	2.2	0.2	0	9.6
2	0.9					12	12	26	2.2	0.2	0	4.7
3	1.0					26	24	24	2.0	0	0	5.4
4	1.2					38	22	24	1.6	0	0	4.2
5	1.7					45	17	24	1.0	0	0	2.2
6	1.8					41	12	21	0.8	0	8.1	1.8
7	1.8					48	13	18	0.8	0	4.2	1.6
8	2.2					54	28	17	0.8	0	1.6	1.6
9	3.6					58	43	14	0.8	0	0	1.5
10	3.6					63	47	11	0.8	0	0	1.4
11						32	66	11	0.6	2.0	0	1.4
12						24	78	9.0	0.6	0.8	0	1.4
13						36	94	8.7	0.5	0	0	1.4
14						39	109	5.9	0.5	0	0	1.4
15						32	113	4.4	0.5	0	0	1.4
16						21	96	6.1	0.6	0	0	1.4
17						20	106	6.1	1.0	0	0	1.4
18						18	106	6.6	0.9	0	0	1.4
19						18	94	6.6	0.8	0	0	1.4
20						16	91	5.4	0.6	0	0	1.4
21						17	88	4.7	0.5	0	0	1.4
22						17	91	4.2	0.4	0	0	1.4
23						15	92	3.8	0.4	0	0	1.4
24						9.0	76	3.2	0.4	0	0	1.4
25						12	73	2.8	7.5	0	0	1.4
26						10	63	2.8	0.6	0	0	1.4
27						9.6	54	2.8	0.4	0	0	1.4
28						10	52	2.8	0.4	0	0	1.4
29						15	48	2.8	0.4	0	4.2	1.4
30						21	36	2.2	0.2	0	13	1.4
31						24		2.2		0	6.6	..
Total	18.6					810.6	1860	314.1	30.8	3.2	37.7	62.0
Mean	Oct. 1					26.1	62	10.1	1.03	0.10	1.22	2.07
Max.	to 10					63	113	31	7.5	2.0	13	9.6
Min.						9	12	2.2	0.2	0	0	1.4
Acre-ft.	37					1610	3690	623	61	6.3	75	123

Total run-off for period = 6,225 acre-feet.

Discharge of Mancos River Near Mancos, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	2				9	51	112	228	120	27	26
2	5	3				9	56	96	239	117	23	21
3	5	3				9	60	88	278	112	27	18
4	5	2				9	57	81	308	104	29	16
5	5	2				9	50	76	320	95	27	14
6	5	2				7	44	82	345	85	23	13
7	4	2				7	36	88	353	71	23	23
8	4	2				7	38	118	312	66	22	29
9	4	2				7	36	153	330	64	18	19
10	4	2				7	29	180	330	66	27	26
11	3	2				8	28	217	322	65	21	23
12	4	2				8	35	221	305	64	23	18
13	5	2				8	47	217	295	77	17	15
14	4	2				8	64	195	332	62	14	14
15	3	2				8	78	172	338	60	14	12
16	3	2				11	78	166	305	55	26	11
17	3	2				11	83	160	221	56	21	8
18	3	2				11	97	158	234	59	18	6
19	4	2				11	107	140	252	67	14	4
20	4	2				14	125	133	257	61	11	4
21	3	2				14	129	131	264	52	10	6
22	3	2				17	118	138	243	46	10	5
23	3	2				11	122	158	234	44	16	4
24	3	2				11	108	201	212	41	37	7
25	2	2				16	89	262	188	34	27	18
26	2	2				21	100	300	176	31	24	27
27	2	2				22	140	288	174	30	24	30
28	2	2				33	160	288	162	33	39	28
29	2	2				36	152	295	136	27	39	25
30	2	2				50	135	286	135	29	37	23
31	3	2				56	..	252	28	30	..	..
Total	110	65	62	62	112	465	2452	5457	7828	1921	718	493
Mean	3.55	2.17	2	2	4	15	81.7	176	261	62.0	23.2	16.4
Max.	6	3				56	160	300	353	120	39	30
Min.	2	2				7	28	76	135	27	10	4
Acre-ft.	218	129	123	123	222	922	4860	10820	15530	3810	1420	978

Total run-off for water year 1934-35 = 39,155 acre-feet.

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Mancos River Near Mancos, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	21	5.4	...	...	...	10	31	268	162	16	12	111
2.	17	6.2	...	...	...	15	30	315	123	12	41	79
3.	12	5.8	...	...	...	22	32	367	90	18	136	90
4.	12	4.6	...	...	...	26	35	379	67	22	157	57
5.	11	5.8	...	...	...	29	40	435	61	19	145	50
6.	8.2	10	...	...	...	30	45	383	81	17	109	37
7.	6.2	7.0	...	...	...	34	50	274	99	16	91	25
8.	5.0	4.2	...	...	...	37	66	195	113	16	115	20
9.	4.2	4.2	...	...	...	44	75	162	115	15	74	17
10.	3.4	6.2	...	...	...	50	91	145	117	18	42	18
11.	3.0	8.2	...	...	...	48	119	150	119	50	31	29
12.	2.8	12	...	...	...	50	169	164	115	31	28	23
13.	2.8	5.8	...	*2.9	...	52	245	187	103	15	32	15
14.	2.4	3.4	...	...	...	61	288	179	97	11	24	11
15.	2.2	4.6	...	...	...	64	284	179	86	8.8	18	8.8
16.	2.6	2.6	...	...	...	58	308	201	77	8.8	12	7.6
17.	2.4	2.6	...	...	...	41	356	206	71	7.0	9.4	6.2
18.	1.8	3.0	...	...	...	43	308	204	63	6.2	8.2	6.2
19.	2.6	3.0	...	...	...	45	274	209	56	5.0	37	8.2
20.	10	3.0	...	...	...	26	315	206	58	5.0	48	10
21.	7.0	3.0	...	...	...	24	344	187	52	5.4	41	7.6
22.	5.4	3.0	...	...	...	21	352	162	42	7.6	32	30
23.	7.0	3.0	...	...	...	20	333	174	42	2.8	20	23
24.	5.8	3.0	...	...	...	20	326	192	38	2.4	14	14
25.	7.0	3.0	...	...	...	18	322	179	41	5.8	12	11
26.	11	3.0	...	...	...	16	308	184	31	6.6	9.4	8.2
27.	9.4	3.0	...	...	*3.5	14	322	184	21	9.4	6.2	11
28.	6.6	3.0	...	...	...	14	319	143	23	8.2	12	18
29.	6.6	3.0	...	...	...	16	319	142	25	16	71	16
30.	6.2	3.0	...	...	...	19	274	169	21	30	230	17
31.	4.2	...	...	...	...	25	...	190	...	11	179	...
Total	208.8	137.6	...	...	...	992	6380	6714	2214	422.0	1796.2	794.8
Mean.	6.74	4.59	3.0	3.0	3.5	32.3	213	217	73.8	13.6	57.9	26.5
Max..	21	12	...	...	...	64	356	435	162	50	230	111
Min..	1.8	2.6	...	...	...	10	30	142	21	2.4	6.2	6.2
Acre-ft.	414	273	184	184	201	1970	12650	13320	4390	837	3560	1580

Total run-off for water year 1935-36=39,563 acre-feet.

Discharge of Mancos River Near Towaoc, Colorado, for Year Ending Sept. 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	1	...	...	...	...	78	173	156	70	8	36	36
2.	1	...	...	...	...	82	156	125	62	6	36	36
3.	1	...	...	...	...	88	140	140	58	3	25	25
4.	1	...	...	...	...	98	125	173	52	1	20	20
5.	1	...	...	...	...	88	125	190	48	8	18	18
6.	0	...	...	...	...	78	140	230	42	2	16	16
7.	0	...	...	...	...	70	147	253	30	2	14	14
8.	0	...	...	...	...	70	140	230	12	2	55	55
9.	0	...	...	...	...	75	140	190	8	1	48	48
10.	0	...	...	...	...	76	173	210	8	2	28	28
11.	0	...	...	...	...	61	190	230	8	3	22	22
12.	0	...	...	...	...	54	210	253	6	25	22	22
13.	0	...	...	...	...	55	210	230	3	12	20	20
14.	0	...	...	...	...	78	253	230	7	6	16	16
15.	0	...	...	...	...	156	253	253	6	3	14	14
16.	0	...	...	...	...	183	218	244	3	36	8	8
17.	1	...	...	...	...	210	190	190	3	34	6	6
18.	1	...	...	...	...	176	190	140	6	16	6	6
19.	1	...	...	...	...	156	173	140	6	14	6	6
20.	0	...	...	...	...	176	156	150	8	12	6	6
21.	0	...	...	...	...	190	156	156	8	8	6	6
22.	1	...	...	...	...	190	156	156	6	7	6	6
23.	1	...	...	...	...	37	175	156	6	6	6	6
24.	1	...	...	...	...	29	166	173	3	48	8	8
25.	1	...	...	...	...	25	134	230	2	62	117	117
26.	1	...	...	...	...	38	98	328	1	30	48	48
27.	1	...	...	...	...	43	125	318	0	30	48	48
28.	1	...	...	...	...	43	163	276	0	36	30	30
29.	1	...	...	...	...	44	173	253	2	36	30	30
30.	1	...	...	...	...	70	190	230	76	6	36	18
31.	1	...	...	...	...	78	202	...	12	36	...	...
Total	18	...	...	...	...	3712	5980	5130	492	531	739	739
Mean.	0.58	1.0	1.0	2.0	10.0	24.0	124	193	171	15.9	17.1	24.6
Max..	1	...	...	...	...	210	328	253	70	62	117	117
Min..	0	...	...	...	...	54	125	76	0	1	6	6
Acre-ft.	36	60	61	123	555	1480	7360	11860	10180	976	1050	1470

Total run-off for water year 1934-35=35,211 acre-feet.

*Discharge measurement.

Discharge of Mancos River Near Towaoc, Colorado, for Year Ending Sept. 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	13	11	8.0	....	8	32	86	264	57	0	0.5	96
2....	11	11	8.0	....	8	45	74	264	49	0	0.5	142
3....	11	11	9.0	....	8	62	69	275	36	0	0	286
4....	11	11	10	....	8	74	80	285	22	0	7.0	133
5....	11	8.5	11	....	8	78	73	337	12	0	19	73
6....	11	8.5	9.0	....	8	73	76	337	9.0	0	3.6	55
7....	11	8.5	8.0	....	8	73	73	294	6.5	0	74	48
8....	11	10	8.0	....	8	74	82	221	2.6	0	65	35
9....	11	11	5.5	....	8	80	111	152	1.0	0	19	29
10....	8.5	11	3.6	....	8	82	114	108	1.0	0	12	23
11....	9.0	12	2.6	....	8	71	133	91	0.7	1.0	10	35
12....	8.5	10	4.5	....	8	60	195	82	0.5	3.6	4.0	35
13....	8.5	10	5.5	....	8	60	294	89	0	1.5	4.0	26
14....	8.5	11	8.0	*7.2	8	62	405	91	0	0.7	2.0	23
15....	8.0	10	2.6	....	8	62	400	84	0	0	5.0	23
16....	8.0	8.5	3.6	....	10	62	400	89	0	0	3.0	18
17....	8.0	8.0	5.5	....	8.5	62	474	89	0	0	2.4	16
18....	8.0	8.0	4.5	....	7.0	62	442	91	0	0	3.0	11
19....	8.0	8.0	4.0	....	9.6	57	385	94	0	0	5.5	101
20....	84	11	4.0	....	8.0	52	385	94	0	0	12	39
21....	13	7.0	4.0	....	5.5	49	430	89	0	0	126	25
22....	9.0	5.5	4.0	....	6.5	49	480	74	0	0	19	82
23....	10	8.0	4.0	....	13	69	436	63	0	0	10	82
24....	11	8.0	4.0	....	13	54	425	54	0	0	12	41
25....	13	8.0	4.0	....	17	45	425	52	0	0	15	23
26....	13	8.0	4.0	....	16	46	400	52	0	0	15	18
27....	13	8.0	4.0	....	13	44	375	49	0	0	9.0	25
28....	12	8.0	4.0	....	14	45	425	46	0	0	4.0	45
29....	12	8.0	4.0	....	20	62	375	39	0	0	221	40
30....	12	5.5	4.0	....	....	69	306	28	0	0	452	25
31....	11	....	4.0	....	....	73	....	24	....	0	221	....
Total	397	272	168.9	....	281.1	1888	8428	4001	197.3	6.8	1355.5	1653
Mean.	12.8	9.07	5.45	6.0	9.69	60.9	281	129	6.58	0.22	43.7	55.1
Max..	84	12	11	....	20	82	480	337	57	3.6	452	286
Min..	8.0	5.5	2.6	....	5.5	32	69	24	0	0	0	11
Acre-ft.	787	540	335	369	558	3740	16720	7940	391	13.5	2690	3280

Total run-off for water year 1935-36 = 37,364 acre-feet.

*Discharge measurement.

Unless otherwise noted, all discharges are in cubic feet per second.

CHAPTER XVIII
ANNUAL REPORTS
OF
IRRIGATION DIVISION
ENGINEERS
FOR
1935-1936

ANNUAL REPORT, IRRIGATION DIVISION NO. 1, YEAR 1935

M. C. Hinderlader,
State Engineer,
Denver, Colorado.

Dear Sir:

Following is a brief report of administration in Irrigation Division No. 1 for the year 1935.

As a result of the extreme drouth during 1934, practically all storage in the division was depleted. This, with subnormal precipitation during the winter, and the dry warm spring, presented the most serious situation ever to confront the agricultural interests in the South Platte valley.

On February 4th Barr Lake storage, on priority of date November 20, 1885 (the first appropriation of any size from the South Platte River), was shut out to supply senior appropriations for direct irrigation in District No. 2. This is the earliest date of record for such demand, and indicates the tendency during years of anticipated low run-off of the extended demand and use of water for direct irrigation.

Barr Lake storage on February 1st was only 6,000 acre-feet, or approximately 50% of its first decree. This priority, in an average year, is usually filled before January 1st.

There was no water in storage in Antero Reservoir on February 1st, and only 11,500 acre feet in Cheesman Lake, consequently a serious condition for an adequate domestic supply faced the City of Denver. In general, this condition as to storage prevailed in all Districts in the South Platte water-shed.

On February 6th orders were sent to the Water Commissioners of Districts 7, 8, 9 and 23 to stop all storage and to limit diversions for direct irrigation to priorities senior to January 1, 1872. This being on demand to supply shortage for the priority of the Evans No. 2 Canal in District No. 2, of date October 5, 1871.

This condition was partially relieved by snow throughout the Division on February 9th, and some storage was permitted. However, shortage for direct irrigation again stopped all storage on February 13th.

During the greater part of March and April, the demands for water for direct irrigation far exceeded the supply, and there was not sufficient water in District No. 2, on a number of days, to supply priorities junior to May 1, 1865. On April 16th priorities junior to December 1, 1863, were without water.

As a result of the decrease in the amount of seepage return there was not sufficient water in the upper part of District No. 1 to supply the Bijou Ditch, priority of date April 20, 1873, this being the first time of record this condition has occurred.

Heavy precipitation the latter part of April supplied all demands for direct irrigation and storage was permitted until April 29th.

On May 19th all demands for both direct irrigation and storage were supplied, and on the 25th surplus water was passing the Prewitt Reservoir Inlet.

Floods of unprecedented discharge occurred on certain tributaries of the South Platte in the plains areas on May 29th and 30th, and 31st. The flood of May 31st, on the Bijou and Kiowa Creeks, in Water District No. 1, reached an estimated peak discharge of 280,000 s.f. at the mouth of Bijou Creek. Heavy damage resulted to headworks and canals below the mouth of Bijou Creek, and a number were unable to divert water from sixty to one hundred days.

On June 13th floods occurred in Pawnee, Wild Cat, Lewis and Cedar Creeks in Water District No. 64.

From the outlook in the spring for a year of extreme drouth and exceptional low run-off, the situation changed to one of abundant, if erratic, run-off, and a year of nearly normal stream flow.

Administration was particularly difficult due to the rapid fluctuations in stream flow, and required constant vigilance and service of the water officials night and day.

Crops were of average yield and prices fair,—a marked improvement over 1934.

Prospects for the irrigation season of 1935 appear favorable with considerable carry-over storage, and a decided increase in the ground water supply and return seepage.

Very truly yours,

CCH/J

C. C. HEZMALIHALCH,
Deputy State Engineer.

IRRIGATION DIVISION NO. 1

TABULATED STATEMENT OF WATER COMMISSIONERS ANNUAL CROP
REPORTS FOR THE IRRIGATION SEASON OF 1935:
CROPS IRRIGATED IN ACRES

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dist. No.	Total No. of Acres That Can Be Irrigated	Alfalfa	Natural Grasses	Cereals	Orchards	Market Gardens Potatoes
1	192,780	39,184	27,135	55,858	129	277 1,421
2	244,400	43,561	13,372	83,534	508	9,550 9,115
3	388,500	59,840	2,895	56,620	2,077	3,834 28,830
4	136,950	51,140	130	58,740	2,045	1,165 2,850
5	105,519	25,000	6,300	43,125	725	395 795
6	195,335	32,614	65,665	61,417	623	659 265
7	115,056	20,910	1,514	38,866	3,227	14,694 177
9	13,115	3,851	2,115	3,983	77	259
64	191,283	42,631	35,033	38,560	183	562 2,644
65	6,309	1,161	270	410	71	177 85

TABULATED STATEMENT OF WATER COMMISSIONERS ANNUAL CROP
REPORTS FOR THE IRRIGATION SEASON OF 1935:
CROPS IRRIGATED IN ACRES

(8)	(9)	(10)	(11)	(12)	(13)	(14)
Dist. No.	Sugar Beets	Beans	Peas	Cabbage	Lettuce	Other Crops Total Irrigated
1	15,316	12,318	....	128	....	23,833 175,599
2	32,887	16,528	981	2,302	....	7,748 220,086
3	46,937	3,044	347	1,425	....	51,016 256,865
4	6,370	2,410	1,575	1,165	182	1,430 129,702
5	12,045	950	340	....	....	5,579 95,501
6	5,727	602	474	178	....	3,455 171,679
7	3,213	320	256	873	305	394 84,749
9	149	96	....	106	....	2,262 12,898
64	26,511	1,615	....	260	....	22,968 170,967
65	....	23	....	....	....	1,400 3,597

ANNUAL REPORT
IRRIGATION DIVISION NO. 1, YEAR 1936

November 30, 1936

M. C. Hinderlader
State Engineer
Denver, Colorado

Dear Sir:

Following is a report of administration in Division No. 1 for the season of 1936:

Runoff in general on the main South Platte was approximately 85% of normal, and in the tributaries the runoff varied from 80% to over 100% of normal.

Storage on April 1st, throughout the division, was only 75% of normal.

On March 2nd demand was made for water for direct irrigation by the Henrylyn Irrigation District, on priority of date November 28, 1907.

Following an investigation and report by the Water Commissioner of District No. 2 to the effect that water could be beneficially applied, the available supply, 100 s.f. was diverted on March 3rd. This diversion continued until March 12th, when it was released to supply senior appropriations in District No. 2.

On March 16th Commissioner of District No. 1 reported all available water being diverted for direct irrigation.

General heavy snow on March 22nd resulted in the release of practically all demands for direct irrigation and the Henrylyn Irrigation District was again permitted to divert 150 s.f. for direct irrigation. With this exception, practically all available water in the Division was being stored.

On March 28th storage in District No. 1 was stopped to supply demands for direct irrigation. However, some storage was again permitted on March 31st.

On April 11th first demand was made by the Commissioner of District No. 1 to supply shortage for priority of date October 1, 1888, for direct irrigation. Orders in accordance with this demand were sent to the Commissioners of all tributary districts.

First demand in District No. 8 was made on April 15th to supply priority of the Highline Canal, of date January 18, 1879.

Following receipt of the order to the Commissioner of District No. 3, of April 11, a protest against compliance with the order was filed with the State Engineer by certain water users in that district. The basis of the complaint was upon the theory that enforcement of the order would result in an un-economical use of the available water supply, and that under

condition of diversions proposed to be followed, no injury could possibly result to users in the lower districts. The order was suspended by the State Engineer pending a hearing to be held at an early date.

Change in conditions, due to precipitation throughout the division on May 7th and 8th, obviated the necessity of a hearing on this appeal. However, a definite decision will no doubt have to be made at some future date.

Following the final decision of the Supreme Court in the Park Reservoir case, in which it was decided that water should be distributed in order of priority, regardless of whether the decree was for storage or direct application, definite instructions in accordance with this decision were sent to all Water Commissioners.

As a consequence of this decision, it was necessary for the water officials to determine the so-called year as the same affects the filling of a reservoir once each year as against a junior demanding and needing the water. This was set as from November 1st to October 31st of the following year; this conforming in general to conditions throughout the state.

June 10th the first diversion of water from the Western Slope thru the Moffat Tunnel was celebrated with appropriate ceremony. Thru arrangements with the Church and Farmers Highline Canals an exchange for Clear Creek water, to which these canals were entitled, for Moffat Tunnel water delivered to these canals via Ralston Creek, was effected. Thus, the City of Denver was permitted an exchange for South Platte River water in excess of the limited capacity of the Ralston Creek channel.

It is expected that the canal from Ralston Creek to Clear Creek will be constructed before next season so that this arrangement will not again be necessary.

To properly safeguard all users involved in an exchange of this nature requires accurate continuous records, both as to time and amounts, and in this connection the officials of the Denver Water Board have cooperated to the fullest extent. Adequate measuring devices have been installed at all points designated by the water officials.

Diversion was discontinued thru the Moffat Tunnel on September 26th; a total of 12,252 acre feet having been diverted from the Western Slope.

An extremely dry period continued throughout July in this division; the Commissioner in District No. 1 reported having to release water from a priority of date October 26, 1881, to supply senior appropriations in District 64, this being the first time in years that such condition has occurred.

Commencing on July 29th, heavy rains occurred in most parts of the division, and on August 7th all demands in Districts 1 and 64 were satisfied and storage was permitted in numerous

reservoirs in the upper districts. Fifteen inches of heavy snow in Denver on September 28th, caused severe damage to trees and shrubs.

During the fall of 1935, some one hundred notices were mailed to ditch owners in District No. 23 requiring the installation or repair of headgates. With few exceptions these orders have been complied with, greatly aiding in the administration in that district.

As in 1935, the extreme fluctuations in stream flow made the administration difficult, and required constant vigilance on the part of the water officials.

Crops in general were above the average both as to yield and quality.

Very truly yours,

C. C. HEZMALHALCH,
Deputy State Engineer.

IRRIGATION DIVISION NO. 1

TABULATED STATEMENT OF WATER COMMISSIONERS ANNUAL CROP REPORTS FOR THE IRRIGATION SEASON OF 1936 CROPS IRRIGATED IN ACRES

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Total No. of Acres That Can Be Irrigated	Alfalfa	Natural Grasses	Cereals	Orchards	Market Gardens	Potatoes
Dist. No.	Irrigated						
1	190,379	35,503	24,980	47,608	154	289	1,563
2	226,065	40,735	10,487	88,187	420	8,924	8,315
3	388,500	62,245	3,640	59,505	2,053	3,867	30,894
4	161,405	57,518	490	69,230	2,015	1,190	3,680
5	105,520	26,050	6,150	44,565	615	460	1,095
6	195,335	32,457	64,080	61,948	623	743	250
7	116,156	19,400	1,684	40,286	3,022	15,039	182
8	112,436	6,838	1,304	17,681	325	656	118
9	14,600	3,732	2,258	4,374	79	201	...
23	...	...	...	...	...	...	...
47	...	...	...	...	...	...	...
48	...	...	...	...	...	...	...
64	195,000	42,017	30,221	47,833	208	563	2,839
65	7,500	1,297	466	163	74	163	76

TABULATED STATEMENT OF WATER COMMISSIONERS ANNUAL CROP REPORTS FOR THE IRRIGATION SEASON OF 1936 CROPS IRRIGATED IN ACRES

	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Sugar Beets	Beans	Peas	Cabbage	Lettuce	Other Crops	Total Irrigated
Dist. No.	Irrigated						
1	23,139	10,061	...	155	...	30,664	174,116
2	35,530	15,660	695	2,336	...	10,247	221,536
3	51,655	2,426	346	1,304	...	45,500	263,435
4	10,127	2,735	...	865	...	2,240	150,090
5	13,940	700	360	400	...	5,620	99,955
6	6,277	440	384	140	...	5,050	172,392
7	3,208	323	261	864	310	398	84,927
8	1,106	427	...	30	...	997	29,482
9	192	60	18	60	...	2,260	13,234
23	...	...	...	...	...	...	...
47	...	...	...	...	...	...	...
48	...	...	...	...	...	...	...
64	27,958	1,228	...	175	...	18,382	171,424
65	...	...	...	...	...	1,435	3,674

ANNUAL REPORT OF IRRIGATION DIVISION ENGINEER
OF IRRIGATION DIVISION NO. 2 FOR 1935

Pueblo, Colorado, Dec. 31, 1935.

Mr. M. C. Hinderlader,
State Engineer,
Denver, Colorado.

Dear Sir:

I herewith submit my annual report for the year 1935.

The winter of 1934 and 1935 was mild and open. No ice formed in the river, and canals could run water all winter long. The older canals took advantage of this condition to irrigate their land, thereby storing much moisture in the soil. There was no winter storage in reservoirs and the result was that lands under the older canals were well supplied with moisture and the lands under the junior canals were very dry when crop planting time arrived. The dry weather continued through all the spring months. Planting was delayed under some canals as there was no reservoir water or promise of any other water to start crops. On May 16th a general storm started and lasted three days. This storm put considerable moisture in the soil and gave the farmers encouragement to go ahead with their planting. Much of the seeding was late, but favorable fall weather allowed crops to mature.

There was a better flow of water in the river and crops did not suffer as much as in 1934. The precipitation during the growing months was about 55 per cent of the average, so canals having junior decrees suffered from lack of water in July and August.

The snowfall in the mountains had a water content of 2.56 inches on April 1st. The average for nineteen years is 4.10 inches. However, considerable additional snow fell in April and May before the melting started. The summer rainfall in the mountains was considerably more than for the past several years. This aided materially in keeping the streams up during the summer months. We were fortunate in capturing some storage water which was of great benefit.

The flow of the Arkansas River through Pueblo amounted to 384,000 Ac. Ft. which was approximately 75 per cent of the average.

No city or town suffered from lack of water. Pueblo was as short as at any time in its history. At the low time in the spring, water belonging to the city was turned out of the Sugar Loaf Reservoir to keep the stream flow up. The river was dry passing Pueblo on two or three occasions.

Crops under the senior canals were good and under the

junior canals they were short but much better than in 1934. The melon crop was good but prices were low. The sugar beet crop was good and the sugar content was excellent. The factories had a fairly satisfactory campaign, although short.

Below is a tabulation giving the rainfall by months and a comparison with the average monthly rainfall. This table gives an idea of conditions as they affect growing crops:

Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Total
1934	1935	1935	1935	1935	1935	1935	1935	1935	1935	1935	1935	8.21
0.23	0.13	0.08	0.43	0.14	0.42	1.60	1.03	0.30	1.08	2.01	0.76	
Average:												
0.36	0.50	0.31	0.47	0.59	1.31	1.50	1.36	1.94	1.86	0.75	0.66	11.61

The rainfall was approximately 30 per cent short for the year and 40 per cent short during the growing season.

On May 1st the amount of water in storage was 22,891 Ac. Ft. Of this water 10,691 Ac. Ft. was for manufacturing purposes, 848 Ac. Ft. was for municipal use and 601 Ac. Ft. was for power purposes. This left 10,698 Ac. Ft. for irrigation and much of this was too low in the reservoirs to be drawn out. On November 1st there was 73,178 Ac. Ft. in storage. The amount for municipal use was 5,414 Ac. Ft. and for power 8,771 Ac. Ft. This leaves 58,993 Ac. Ft. for irrigation and a portion of this cannot be drawn from the reservoirs.

The reservoir water was practically exhausted in the fall of 1934 and there was none with which to start crops in 1935. The situation was not much better this fall than during the fall of 1934. The average carry-over for the reservoirs for normal seasons is 198,000 for May 1st and 170,000 Ac. Ft. for November 1st.

The season was comparatively free from destructive hail storms. The stream flow for this time of year is nearly up to the average. Quite a contrast to what it was last year, and it may be possible that the reservoirs will catch some winter storage. It is to be hoped that this may happen.

There are seven trans-mountain ditches bringing water to the Arkansas river drainage that require the services of a hydrographer to oversee the self registers and rating flumes. The charts from the ditches must be worked up each week and the amount of water for storage determined and allotted to the reservoir. This makes considerable extra work for this office. A total of 29,977 Ac. Ft. of water was brought over up to Nov. 1, 1935, and either used direct by the canals or stored in reservoirs for future use.

The river was used as a carrier for 51,466 Ac. Ft. of reservoir and trans-mountain water. This water was delivered to canals in the vicinity of Pueblo. A charge of 6,662 Ac. Ft. was made on this water which augmented the stream flow.

Reservoir water plays a very large part in the irrigated

agriculture of the Arkansas Valley. The running of reservoir water long distances requires close attention to see that water is turned in and out at the proper time and the rights of the other canals are protected.

We have been passing through a drought period. The last wet year was 1923. Since that time, some twelve years, we have had two years in which the rainfall was a little above the average of 11.61 inches. In October, 1929, after the growing season late rains brought the precipitation up to the average. There were nine years in which the rainfall was below the average. The result has been the exhaustion of the reserve water in the reservoirs and the lowering of the water table under the irrigated lands which necessitates an extra amount of water to produce average crops. The lower water table was very noticeable during the 1935 season. Irrigators complained about the great amount of water required to grow crops. We are living in hopes that this dry spell will end and that we will receive normal rainfall soon.

Yours truly,

C. W. BEACH.

DIVISION NO. 2

TABULATION SHOWING AMOUNT IN STORAGE IN MAJOR RESERVOIRS—1935

EXPRESSED IN ACRE FEET											
Number Water District	Name of Reservoir	Dec. 1, 1934	Jan. 1, 1935	Feb. 1, 1935	Mar. 1, 1935	Apr. 1, 1935	May 1, 1935	June 1, 1935	July 1, 1935	Aug. 1, 1935	Sept. 1, 1935
10 Fountain Valley No. 2	532	606	708	1,496	1,748	1,845	3,214	2,671	1,622	810	912
10 Fountain Valley No. 3	37	36	46	0	59	59	459	445	0	0	1,116
10 Spring Run.....	5	5	5	0	15	15	15	15	164	180	127
10 Calahan	0	0	0	0	0	0	0	0	0	0	0
10 Cheyenne Mountain.....	0	0	0	0	0	0	0	0	0	0	0
10 Monument (State)...	0	0	0	0	0	0	0	308	190	95	95
11 Sugar Loaf.....	3,996	3,996	3,996	3,996	3,996	3,996	4,944	289	363	363	363
11 Twin Lakes.....	5,374	5,374	5,374	5,374	5,374	5,374	5,877	13,272	7,226	7,463	7,668
11 Clear Creek.....	164	164	164	164	164	164	38,461	25,572	10,633	10,977	13,425
12 Skagway	504	947	771	639	550	604	727	9,854	7,622	1,752	855
12 Mount Pisgah.....	0	0	0	0	0	0	2,853	2,853	2,875	2,868	2,512
12 Brush Hollow.....	120	119	132	152	152	152	1,670	1,869	917	917	924
12 City Colorado Springs.....	649	395	332	485	395	395	881	3,064	287	1,636	1,636
13 Dye-Deweese	0	0	0	0	165	0	10	1,734	4,326	3,837	4,637
14 Teller	0	0	0	0	0	0	0	0	0	807	866
14 Lake Henry.....	0	0	0	0	0	0	0	2,865	3,147	3,727	2,630
14 Lake Meredith.....	0	0	0	0	0	0	0	0	0	0	2,056
15 Beckwith.....	63	116	153	198	198	198	4,666	349	134	134	153
15 Minnequa.....	1,237	1,261	1,235	1,235	1,282	1,282	1,283	1,191	1,189	1,128	1,232
15 C. F. & I. Res. No. 2	2,762	2,762	2,762	2,762	2,689	2,689	2,695	2,744	2,607	2,633	2,665
15 C. F. & I. Res. No. 3	2,488	2,505	2,505	2,505	2,396	2,396	2,310	2,098	2,133	2,178	2,477
16 Coler.....	0	*	*	*	*	*	*	1,421	4,410	4,410	4,410
16 Cucharas	0	*	*	*	*	*	*	4,156	9,576	9,576	9,580
16 Bradford.....	0	*	*	*	*	*	*	0	0	0	0
16 Huertano Valley.....	0	*	*	*	*	*	*	0	152	152	0
16 Crane Holmes No. 1.	0	*	*	*	*	*	*	0	0	0	0
16 Lindsley Lake.....	0	*	*	*	*	*	*	0	0	0	0
16 Holita	0	*	*	*	*	*	*	111	111	50	0
16 Valdez	0	*	*	*	*	*	*	0	0	0	0
16 Dorson	0	*	*	*	*	*	*	1,598	1,379	1,366	1,247
17 Dye.....	0	0	0	0	0	0	0	2,326	3,761	2,174	1,864
17 Holbrook No. 1.....	0	0	0	0	0	0	0	865	4,492	4,823	1,722
17 Horse Creek.....	0	0	0	0	0	0	0	3,210	8,529	7,063	686
17 Adobe Creek.....	0	0	0	0	0	0	0	3,184	3,150	1,487	0
18 Seven Lakes.....	0	*	*	*	*	*	*	0	0	*	1,069
19 Model	0	0	0	0	0	0	0	3,378	1,386	2,619	3,752
19 Hermosa	0	0	0	0	0	0	0	2,253	0	1,152	1,169
19 North Lake.....	621	621	612	536	460	503	798	798	776	776	777
67 Nee No Shee.....	0	0	0	0	0	0	0	0	0	0	0
67 Nee Gronda.....	0	0	0	0	0	0	0	0	0	0	0
67 Nee Sopan.....	0	0	0	0	0	0	0	0	0	0	0
67 Nee Shah (Queen).....	0	0	0	0	0	0	0	0	0	0	0
67 Two Buttes.....	3,425	3,370	3,315	3,260	3,041	5,828	8,018	3,172	7,113	11,952	11,698
67 Thurston	3,508	0	0	0	0	0	0	0	0	0	0

*No report.

ANNUAL REPORT OF IRRIGATION DIVISION ENGINEER
OF IRRIGATION DIVISION NO. 2 FOR 1936

Pueblo, Colo., Nov. 23, 1936.

Mr. M. C. Hinderliser,
State Engineer,
Denver, Colorado.

Dear Sir:

The winter of 1935 and 1936 was dry and colder than recent winters. Some winter irrigation was accomplished and freezing weather also permitted storage by the senior reservoirs. The early spring of 1936 was very dry but rains started in April and in May there was an exceptional rainfall which amounted to 4.4 inches. This put the ground in good condition for seeds and started off in excellent shape the crops already planted. The heavy rains in May provided plenty of irrigation water and storage in many reservoirs.

During the winter months an extra amount of snow fell on the high mountains from Salida northwest to Leadville. After the May rains had passed the run of snow water kept the river up until early in July so that all had a good run of irrigation water during May and June and considerable storage was obtained. The early part of July was dry and the junior canals began to suffer. Rains again started on July 27th and the irrigation water and some storage kept up for over two weeks so that all were well irrigated again.

Crops under all canals were good and much above the average for the past few years. Prices of grain, hay, and other farm crops improved to an extent that farmers are beginning to see a profit once more.

Below is a tabulation of the rainfall by months which will give a good idea of irrigation conditions:

Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Total
1935	1935	1936	1936	1936	1936	1936	1936	1936	1936	1936	1936	12,49
0.10	0.11	0.23	0.44	0.14	0.29	4.40	0.62	1.42	2.21	1.77	0.76	
<i>Average by months:</i>												
0.36	0.50	0.31	0.47	0.59	1.31	1.50	1.36	1.94	1.86	0.75	0.66	11.61

The rainfall was 0.88 inches in excess for the year and during the five growing months of April, May, June, July and August, it was 0.97 inches in excess of the average. The moisture came at a very opportune time. In many localities the ground was badly dried out and the water table lowered so that more water was required and the water table is not yet up to the level of previous years.

On May 1, 1936, the amount of water in storage was 75,982 acre feet. This was divided as follows: 2,444 acre feet for domestic use; 12,928 acre feet for manufacturing use and the remainder of 60,610 acre feet was for irrigation purposes. The

average storage for all purposes on May 1st amounts to 198,000 acre feet.

The amount of water in storage on November 1, 1936 was 135,437 acre feet. Of this amount 9,298 acre feet are for manufacturing purposes and 5,778 acre feet for domestic purposes, leaving 120,361 acre feet for irrigation. The average carryover for November 1st over a period of years is 170,000 acre feet.

The fall rains have increased the river flow to a point near normal. If a cold winter comes there will be water for storage during the winter months.

The flow of water through Pueblo for the past irrigation season amounted to 522,700 acre feet. Of this amount 39,117 acre feet was transmountain water from the Pacific slope. This would leave 483,583 acre feet as the natural flow of the Arkansas river which is below normal. The average flow for the past 41 years is 523,300 acre feet.

The snowfall in the mountains had a water content of 5.08 inches which was about twenty-five percent above the average for the past twenty-three years. The average snowfall is 4.07 inches. The snowfall lay on the high mountains from Salida and northwest to Leadville. The water from the melting snows came out in large quantities which permitted all canals to draw water. There was no shortage of domestic water for any of the cities or towns. All were well supplied during the year.

There was some hail in isolated places but no general storms of large proportions.

We now have seven transmountain ditches which have self-registers and require checking and constant attention. The charts must be figured up every Monday and the water allotted to the various canals or reservoirs. Estimates must be furnished for the following week of the probable flow in order to insure as little disturbance as possible to the natural flow of the streams. The seven transmountain ditches brought over a total of 39,117 acre feet. This water is an addition to the flow of the Arkansas River. The Twin Lakes Company have completed their second tunnel and expect to double their supply of water from the western slope.

There was a total of 89,711 acre feet of transmountain and mountain reservoir water turned into the river for canals near Pueblo and east of here. A total charge of 9,755 acre feet was made for the carriage of this water which allowed for evaporation loss and the remainder went to add to the stream flow. These figures show the large part transmountain and mountain reservoir water have to do with the irrigated agriculture of the Arkansas Valley. They furnish a supply when the streams are low and the water is badly needed and thereby add to crop production and farm income.

Yours respectfully,

C. W. BEACH,
Division Engineer Irrl. Division No. 2.

DIVISION NO. 2

TABLE I
TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL CROP REPORTS FOR SEASON 1936

TABULATION SHOWING AMOUNT OF WATER IN STORAGE IN THE MAJOR RESERVOIRS IN IRRIGATION DIVISION NO. 2—DECEMBER 1, 1935, TO NOVEMBER 1, 1936

EXPRESSED IN ACRE-FEET

Number District	Name of Reservoir	Dec. 1, 1935	Jan. 1, 1936	Feb. 1, 1936	Mar. 1, 1936	Apr. 1, 1936	May 1, 1936	June 1, 1936	July 1, 1936	Aug. 1, 1936	Sept. 1, 1936	Oct. 1, 1936	Nov. 1, 1936
10	Fountain No. 1	1,116	1,370	2,571	3,428	3,428	3,428	3,000	2,240	1,116	1,622	1,622	3,000
10	Fountain No. 2	11	192	192	192	192	192	116	116	93	93	93	93
10	Spring Run	11	47	47	47	47	47	47	47	23	21	192	0
10	Calahan	23	69	69	69	69	69	61	47	0	0	0	15
10	Cheyenne Mt.	46	69	69	69	69	69	61	47	0	0	0	95
10	Monument (State)	363	363	363	363	363	363	363	363	46	46	46	95
11	Sugar Leaf	7,696	7,696	7,696	7,696	7,476	6,522	14,197	13,262	12,947	8,139	7,653	403
11	Twin Lakes	13,857	14,355	14,355	14,300	14,421	13,523	33,450	43,352	23,284	13,364	15,118	7,872
11	Clear Creek	858	0	0	0	0	0	205	10,274	9,770	5,832	7,376	1,778
12	Skagway	2,021	1,257	1,257	1,232	1,232	1,232	522	522	574	599	2,880	2,574
12	Mount Pisgah	9,17	1,091	1,160	1,265	1,265	1,265	1,905	1,713	149	574	2,600	2,575
12	Brush Hollow	1,677	2,203	3,151	2,969	2,969	2,969	2,370	3,798	3,628	2,973	1,200	1,800
12	City Colorado Springs	5,335	4,165	3,492	3,151	2,948	3,226	3,568	3,812	3,297	2,721	4,200	4,370
13	Deweese-Dye	2,723	4,326	4,326	4,326	4,248	4,248	754	928	601	558	1,455	1,171
14	Teller	859	817	817	778	778	778	3,495	5,139	4,897	6,019	4,850	3,147
14	Lake Henry	1,662	2,704	5,177	4,850	4,850	4,850	0	0	0	0	0	0
14	Lake Meredith	0	0	0	0	0	0	0	0	0	0	0	0
15	Beckwith	1,98	1,98	319	319	319	319	319	319	252	252	252	319
15	Minnequa	1,332	1,308	1,312	1,312	1,312	1,312	1,145	1,206	1,254	1,244	1,204	1,273
15	C. F. & I. No. 2	2,722	2,750	2,662	2,662	2,662	2,662	2,513	2,612	2,713	2,766	2,713	2,786
15	C. F. & I. No. 3	2,443	2,589	2,509	2,509	2,509	2,509	2,211	2,212	2,424	2,218	2,484	2,467
16	Coler	*	*	4,497	4,497	4,497	4,497	453	453	798	410	323	323
16	Cucharas	*	*	4,956	4,956	4,956	4,956	4,956	4,956	6,000	6,000	24,690	35,119
16	Bradford	*	*	0	0	0	0	0	0	0	0	0	0
16	Huerfano Valley	*	*	*	*	*	*	329	187	329	214	237	1,128
16	Crane Holmes No. 1	*	*	0	0	0	0	0	0	0	264	1†	0
16	Lindsay Lake	*	*	0	0	0	0	0	0	0	862	*	731
16	Holita	*	*	8	*	37	37	37	37	19	232	23	50
16	Valdez	*	*	0	0	0	0	0	0	0	170	18	18
17	Dotson	*	*	*	*	847	0	866	1,762	1,357	1,729	1,707	1,426
17	Dye	*	*	776	2,441	4,139	3,156	1,560	3,331	1,885	2,362	2,081	2,031
17	Holbrook No. 1	350	1,601	4,233	4,495	4,495	3,035	2,750	2,750	5,200	3,351	2,498	1,551
17	Horse Creek	0	0	0	3,467	3,467	3,467	0	0	13,450	13,450	13,269	8,250
17	Adobe	0	0	0	0	0	0	0	0	0	0	2,693	2,200
18	Seven Lakes	622	442	442	205	205	168	168	279	0	3,110	1,443	818
19	Model	3,528	3,328	4,127	3,927	3,927	3,203	2,622	4,869	2,086	1,754	1,336	547
19	Hermosa	*	*	152	*	*	*	506	506	506	506	506	*
19	North Lake	777	690	612	503	503	536	776	776	808	808	808	808
67	Nee No She	777	0	0	0	0	0	0	0	0	0	0	0
67	Nee Gronda	0	0	0	0	0	0	0	0	0	0	0	0
67	Nee Sonah	0	0	0	0	0	0	0	0	0	0	0	0
67	Nee Skah or Queen	0	0	0	0	0	0	0	0	0	0	0	0
67	Two Buttes	10,555	9,476	9,539	9,666	9,666	9,539	8,788	29,951	32,741	42,545	37,650	32,741
67	Thurston	0	0	0	0	0	0	0	0	0	0	0	0

*No report. †Dam broke. ‡Dam out.

ANNUAL REPORT OF IRRIGATION DIVISION ENGINEER
OF IRRIGATION DIVISION NO. 3 FOR 1935

Alamosa, Colorado, December 7, 1935

Mr. M. C. Hinderliser
State Engineer
Denver, Colorado

Dear Sir:

In compliance with the provisions of the statutes I submit herewith my annual report.

This past season has been a remarkable one in that it started out with a very discouraging condition as a result of the 1934 drouth, and up until late in the winter a sub-normal snow fall was had. However, heavy snows came in February and March which brought the conditions up to normal and this, together with frequent showers during the summer, has made one of the best crop seasons for many years. Practically all ditches carried their full appropriation. A satisfactory fill in most of the reservoirs gives promise of a good season next year.

Yours truly,

WALTER D. CARROLL,
Irrigation Division Engineer, Division No. 3.

USE OF WATER BY DITCHES AND CANALS

Division No. 3—1935

District No.	No. of Priorities Reported	First Day Water Was Diverted from Natural Streams for Irrigation	Last Day Water Was Diverted from Natural Streams for Irrigation	Maximum No. of Days Water Was Diverted from Natural Streams
20	419	February 15	November 25	235
21	76	March 1	November 6	236
22	187	February 1	October 30	280
24	98	April 1	October 31	214
25	96	March 5	October 22	236
26	115	March 1	November 15	269
27	77	March 12	November 15	248
35	70	March 25	November 5	206

District No.	No. Acre-feet Used by Ditches and Canals from Natural Streams	Total No. of Acres That Can Be Irrigated	Alfalfa	Natural Grasses	Cereals	Market Garden Peas
20	734,585	491,334	34,156	52,824	58,685	1,448
21	119,045	119,434	5,338	77,907	6,654	7
22	453,686	145,380	14,653	27,749	17,200	2,717
24	36,872	23,830	4,640	3,511	9,802	3,795
25	61,393	62,806	1,778	24,883	613	...
26	53,427	42,506	2,345	24,334	496	70
27	13,944	8,815	1,105	3,307	162	11
35	116,280	63,336	2,945	12,916	2,106	825
Totals	1,589,432	957,441	66,960	226,931	95,718	8,873

COMPARISON OF ACRE-FEET OF WATER USED BY DITCHES

1932	1,223,321
1933	1,086,786
1934	700,740
1935	1,589,432

District No.	Potatoes	Sugar Beets	Beans	Field Peas	Cabbage	Cauli- flower
20	38,897	1,454	65	30,765	...	...
21	3,611	66	689	4,104	225	...
22	4,777	554	618	5,129	326	...
24	681	100	1,088	6,214	...	...
25	89	...	...	...	...	...
26	104	...	...	33,480	...	...
27	393	...	1	333	...	...
35	240	...	134	851	346	...
Totals	48,792	2,174	2,595	80,876	897	...

District No.	Sweet Clover	Pasture	Lettuce	Other Crops	Total Irrigated
20	...	151,402	1,503	19,010	389,709
21	...	331	...	3,578	102,510
22	2,066	...	...	32,044	107,833
24	...	...	...	783	30,614
25	...	9	...	...	27,372
26	...	6,131	5	...	66,960
27	...	2,421	5	665	8,403
35	...	1,890	...	70	22,323
Totals	2,066	162,184	1,508	56,150	755,724

COMPARISON TOTAL ACRES IRRIGATED

1932	705,787
1933	660,934
1934	638,766
1935	755,724

District No.	Cost of Superintendence	Repairs	Improvements
20	\$2,220.00	\$5,735.00	\$ 350.00
21 .....	.....	385.00	555.00
22	725.00	450.00	575.00
24	2,165.00	1,915.00	390.00
25 .....	.....	.....	.....
26 .....	.....	.....	1,145.00
27 .....	.....	.....	.....
35 .....	.....	.....	.....
Totals	\$5,110.00	\$8,485.00	\$3,015.00

COST OF ADMINISTRATION

Cost of administration of this division for the year 1935 was \$13,893.00. This includes salaries of all water commissioners and their deputies. 755,724 acres were irrigated at a cost of .0183 per acre.

WATER COMMISSIONERS' RESERVOIR REPORTS:

District No.	Capacity in Acre-Feet in All Reservoirs	Quantity of Water in Acre-Feet in Reservoirs May 1, 1935	Quantity of Water in Acre-Feet in Reservoirs November 1, 1935	First Day Water Was Used from Reservoirs in 1935	Last Day Water Was Used from Reservoirs in 1935	Maximum No. Days Water Was Used from Reservoirs	Total No. Acre-Feet Water Used from Reservoirs
20.....	132,922	12,160	33,216	April 12	Sept. 30	71	43,825
21.....	31,752	2,696	10,232	May 12	Nov. 15	125	10,120
22.....	14,052	297	732	May 7	Oct. 10	180	10,460
24.....	103,155	7,446	11,759	April 28	Oct. 2	157	28,598
35.....	26,359	5,617	8,422	April 21	Sept. 20	118	10,434
Totals....	308,240	28,216	64,361				103,437

COMPARISON TOTAL ACRE FT.
IN RESERVOIRS

	May 1	Nov. 1		
1932.....	41,488	42,211	1932	147,101
1933.....	56,875	29,080	1933	97,058
1934.....	47,489	11,067	1934	62,391
1935.....	28,216	64,361	1935	103,437

COMPARISON ACRE FEET OF
WATER CARRIED FROM
RESERVOIRS

AMOUNT OF WATER IN STORAGE (ACRE-FEET) IN RESERVOIRS ON
THE FIRST OF EACH MONTH FROM DECEMBER 1, 1934
TO NOVEMBER 1, 1935

	Rio Grande	Santa Maria	Continental	Sanchez	Terrace	
December, 1934.....	1,070	2,516	550	4,167	375	
January, 1935.....	2,166	3,301	575	5,187	570	
February, 1935.....	3,215	3,962	600	5,827	817	
March, 1935.....	4,404	4,567	625	6,514	817	
April, 1935.....	4,458	4,675	650	7,173	1,262	
May, 1935.....	250	4,620	750	7,446	1,262	
June, 1935.....	250	6,143	273	10,840	1,948	
July, 1935.....	51,113	11,349	7,668	15,079	17,700	
August, 1935.....	42,052	11,813	6,489	12,353	13,823	
September, 1935.....	22,558	3,910	4,206	9,696	9,302	
October, 1935.....	21,356	3,836	8,373	10,738	8,453	
November, 1935.....	21,473	3,836	3,310	11,759	7,999	
	La Jara	Mountain Home	Smith	Cove Lake	Salazar No. 1	
December, 1934.....	Dry	337	1,231	...	...
January, 1935.....	Dry	653	1,581	...	...
February, 1935.....	Dry	1,096	1,996	...	...
March, 1935.....	Dry	1,293	2,603	...	...
April, 1935.....	Dry	1,566	2,962	...	...
May, 1935.....	1,434	2,492	3,125	297	160	
June, 1935.....	3,708	3,705	5,336	5,632	...	
July, 1935.....	3,960	6,379	5,336	5,160	...	
August, 1935.....	3,708	6,850	4,869	3,952	...	
September, 1935.....	3,056	4,805	3,852	1,620	...	
October, 1935.....	2,679	4,341	3,514	1,524	...	
November, 1935.....	2,223	4,569	3,853	732	60	
	Salazar No. 2	Archuleta	Hunter's Lake	Spruce Lake No. 1	Spruce Lake No. 2	Dude Ranch
December, 1934.....	...	...	...	...	...	...
January, 1935.....	...	...	...	...	...	...
February, 1935.....	...	...	...	...	...	...
March, 1935.....	...	...	...	...	...	...
April, 1935.....	...	...	...	...	...	...
May, 1935.....	None	97	48	88	93	125
June, 1935.....	...	...	...	...	...	...
July, 1935.....	...	...	...	...	...	...
August, 1935.....	...	...	...	...	...	...
September, 1935.....	...	...	...	...	...	...
October, 1935.....	...	...	...	...	...	...
November, 1935.....	None	None	48	None	None	125
	Road Canon	Poage	Lost Lakes	Shaw	Bristol Head No. 1	Bristol Head No. 2
May, 1935.....	2,400	75	672	638	None	None
June, 1935.....	...	...	...	...	...	...
July, 1935.....	...	...	345	...	...	...
August, 1935.....	...	...	...	428	...	...
September, 1935.....	...	...	...	...	...	...
October, 1935.....	...	...	...	...	...	...
November, 1935.....	2,400	None	None	None	350	None
	Beaver Park	Regan	Cheno-weth	Eastdale No. 1	Eastdale No. 2	Goin Lake
May, 1935.....	...	250	40	None	180	40
June, 1935.....	500	...	...	...	...	...
July, 1935.....	2,030	...	...	...	...	...
August, 1935.....	...	...	...	...	...	...
September, 1935.....	...	...	...	...	...	...
October, 1935.....	...	...	...	...	...	...
November, 1935.....	None	None	40	None	634	None
	Humphries Reservoir	Trout Lake	Wright's Lake	Ruby Lake	Fuchs	Spring Cr.
May, 1935.....	842	198	90	120	...	...
June, 1935.....	...	...	...	...	...	...
July, 1935.....	...	...	...	...	...	...
August, 1935.....	...	...	...	...	88	70
September, 1935.....	...	110	...	...	...	...
October, 1935.....	...	...	...	...	...	...
November, 1935.....	842	None	None	None	None	None

PARSHALL FLUMES**District No. 20**

In cooperation with the water users and FERA, a 12-foot Parshall flume was installed in the Pinos Creek, 12 miles above Del Norte, which will facilitate the work of the water officials on this stream. By the use of the telephone a report is obtained which saves the water commissioner a trip. An automatic is installed in this flume.

An 8-foot Parshall flume was installed on Rock Creek at the mouth of the canon. The work was done by the FERA and the material furnished by the water users. An automatic was installed in connection with flume. This, in connection with the flume and automatic on the Moeller place, 3 miles lower down, will furnish a good check on the run off of the stream and may have a quieting effect on the belligerents on the creek.

District No. 21

The following flumes and headgates were installed.

- 2 2-foot flumes and headgate
- 2 3-foot flumes
- 1 4-foot flume
- 4 5-foot flumes and headgate
- 1 6-foot flume
- 1 7-foot flume

District No. 22

- 2 8-foot flumes and headgate

DITCH IMPROVEMENTS**FERA Projects**

In District No. 21 the La Jara Creek Channel has been cleaned and straightened.

District No. 22, the Antonito Ditch was cleaned and deepened.

District No. 27, the La Garita and Carnero Creeks were cleaned and the channels straightened.

These projects were under the FERA and the work has been well done and will make a saving of water.

HAIL

There were several destructive hail storms in the La Jara District, which resulted in a \$250,000 loss, mostly to the early vegetables, market garden peas suffering the greatest loss.

Another hail storm in the vicinity of San Acacia damaged the vegetable crop to a considerable extent; also some wheat fields were damaged.

MUNICIPAL WATER SUPPLY

An FERA project completed the repairs on the Antonito pipe line to the city supply.

Del Norte water system is functioning in satisfactory manner.

ADJUDICATIONS

Final decree in District No. 24 was entered in which a number of new decrees for irrigation were entered, also a number of decrees for domestic use. This will clear up a situation that has caused the water officials much trouble.

Final decree in District No. 20 was entered affecting a few river rights and some drainage rights.

TRANS-MOUNTAIN DIVERSEONS

We have a number of small trans-mountain diversions, one on Medena Creek, Mosca Pass, where all the water of the creek is diverted to the east slope until July 1 when it is all brought down the original channel to this side.

A diversion on Cochetopa Pass brings water from Lake Fork on the Gunnison watershed across to Saguache Creek.

A diversion from the Pine River on Wemenuche Pass brings water into Wemenuche Creek and into the Rio Grande.

A diversion of water from San Juan on Treasure Pass brings water to the Rio Grande.

Tabor Ditch taking water from Cebolla Creek on the Colorado River water shed and brings it to the Rio Grande.

These are small ditches and on account of being practically inaccessible do not have much supervision from this department.

ANNUAL REPORT OF IRRIGATION DIVISION ENGINEER
OF IRRIGATION DIVISION NO. 3 FOR 1936

Alamosa, Colorado, December 1, 1936.

Mr. M. C. Hinderliser,
State Engineer,
Denver, Colorado.

Dear Sir:

In compliance with the provisions of the statutes, I submit herewith my annual report for the year 1936.

The past season has been one of the best in the history of the Valley.

Starting out with an 88% of normal snow fall on the Rio Grande water shed and with high winds and hot weather during the early part of the season, our water for irrigation from direct diversion from the streams had dropped so that many ditches were shut off early in July, and practically all storage was exhausted. However, during that month rain came and during July, August and September we had 8 inches of precipitation, which matured all crops with considerable storage in the reservoirs. The only harm done by water shortage was to the cereal crops which were damaged by the drouth between irrigation and rain, causing shriveled grain and reduction of yield. With the heavy rains in the mountains and with ground saturated, we are assured of a good run of water for next season.

Yours truly,

WALTER D. CARROLL,
Irrigation Division Engineer, Division No. 3.

WATER COMMISSIONERS' CROP REPORTS

District No.	No. Priorities Reported	First Day Water Was Used	Last Day Water Was Used	Maximum No. Days Diverted from Streams
20	419	March 10	November 6	297
21	76	March 2	November 6	296
22	187	March 1	October 5	217
24	98	April 1	October 31	213
25	96	April 1	November 11	240
26	115	April 6	November 3	212
27	77	April 1	November 15	229
35	70	April 1	October 20	186

District No.	No. Acre-Feet Used by Ditches and Canals from Natural Streams	Total No. Acres That Can Be Irrigated	Alfalfa	Natural Grasses	Cereals	Pasture
20	509,365	411,057	35,055	54,614	51,603	142,691
21	96,261	129,054	4,528	9,325	6,966	8,841
22	351,407	238,013	16,261	30,975	21,548	17,965
24	28,736	19,122	4,366	3,350	11,547	...
25	70,256	63,051	1,671	24,334	457	9
26	35,728	46,961	2,702	15,365	552	6,726
27	10,276	8,967	677	2,627	475	830
35	55,493	35,298	2,897	11,125	2,694	2,699
Totals	1,157,522	951,523	68,157	151,715	95,842	179,761

District No.	Market Garden Peas	Potatoes	Sugar Beets	Beans	Field Peas	Cabbage
20	1,378	39,282	...	...	25,541	162
21	2,137	4,569	151	421	5,057	33
22	1,497	5,086	440	1,013	6,115	266
24	3,340	525	18	1,219	7,115	205
25	...	49	...	...	20	...
26	...	132	...	...	...	...
27	31	380	...	30	345	...
35	1,115	130	15	109	1,215	413
Totals	9,498	50,153	624	2,792	45,408	1,079

District No.	Cauliflower	Sweet Clover	Lettuce	Spinach	Other Crops	Total Acres Irrigated
20	*	28,034	2,657	*	9,110	390,127
21	*	4,228	...	*	...	46,256
22	*	12,344	...	*	...	113,510
24	*	*	1,454	33,139
25	*	*	...	26,540
26	*	...	20	*	...	25,477
27	*	*	115	5,530
35	*	*	23	22,435
Totals	...	44,606	2,677		10,702	663,014

*Reported as other crops.

District No.	Cost of Superintendence	Cost of Repairs	Cost of Improvements	Cost of Water Comrs.	Cost of Administration Deputies
20	.....	.....	.....	\$ 1,994.00	.....
21	.....	.....	.....	1,416.00	\$ 445.00
22	\$2,600.00	\$2,180.00	\$2,080.00	1,368.00	270.00
24	2,175.00	1,650.00	290.00	1,764.00	110.00
25	.....	1,100.00	1,200.00	1,368.00	205.00
26	.....	.....	.....	1,428.00	.....
27	35.00	235.00	205.00	1,470.00	.....
35	.....	.....	.....	882.00	.....
Totals	\$4,810.00	\$5,165.00	\$3,775.00	\$11,690.00	\$1,030.00

COMPARISON—IRRIGATED

COMPARISON 4-YEAR PERIOD—EXPENSES

1932	705,781	1932	.....	\$12,376.00
1933	691,963	1933	.....	11,427.00
1934	638,766	1934	.....	13,251.00
1935	755,724	1935	.....	13,893.00
1936	663,014	1936	.....	11,690.00
		Deputies	.....	1,030.00
				\$12,720.00

WATER COMMISSIONERS' RESERVOIR REPORTS

District No.	Capacity in Acre-Feet in All Reservoirs	Quantity of Water in Acre-Feet in Reservoirs May 1, 1936	Quantity of Water in Acre-Feet in Reservoirs November 1, 1936	First Day Water Was Used from Reservoirs	Last Day Water Was Used from Reservoirs	Maximum Number of Days Water Was Used from Reservoirs	Total Number Acre-Feet Water Used from Reservoirs
20	132,153	41,295	12,766	April 25	Sept. 13	75	40,733
21	31,752	10,611	6,120	June 3	Sept. 25	93	15,722
22	14,052	5,750	1,270	April 1	Nov. 1	210	13,380
24	103,155	15,457	13,461	April 25	Sept. 27	153	25,326
35	26,359	11,306	9,677	April 3	Sept. 13	159	16,946
Totals	307,471	84,419	43,294				111,607

COMPARISON ACRE-FEET CARRIED FROM RESERVOIRS

COMPARISON OF TOTAL ACRE-FEET IN RESERVOIRS

	May 1	Nov. 1
1932	147,101	41,488
1933	97,058	56,875
1934	62,391	47,489
1935	102,537	28,216
1936	111,607	84,419

AMOUNT OF WATER IN STORAGE (ACRE-FEET) IN RESERVOIRS ON THE FIRST OF EACH MONTH FROM DECEMBER 1, 1935, TO NOVEMBER 1, 1936

	Rio Grande Reservoir	Santa Maria Reservoir	Continental Reservoir	Sanchez Reservoir	Terrace Reservoir
December, 1935	1,070	4,837	3,310	11,759	7,152
January, 1936	24,226	5,715	3,310	11,650	5,868
February, 1936	25,520	5,929	3,310	11,578	5,393
March, 1936	26,018	6,500	3,310	11,650	4,643
April, 1936	26,475	6,918	3,310	11,796	4,937
May, 1936	23,578	6,899	3,310	13,750	6,411
June, 1936	23,379	7,865	4,039	16,560	10,948
July, 1936	8,483	5,347	2,495	6,336	8,565
August, 1936	250	2,508	1,435	1,633	5,132
September, 1936	1,252	2,073	874	8,542	4,790
October, 1936	1,055	2,331	528	10,370	3,485
November, 1936	4,980	3,470	528	12,278	4,176

	La Jara Reservoir	Mountain Home Reservoir	Smith Reservoir	Cove Lake	Salazar No. 1 Reservoir
	Reservoir	Reservoir	Reservoir	Reservoir	Reservoir
December,	1935.....	2,057	4,930	4,514	5,160
January,	1936.....	1,960	5,165	4,531	5,750
February,	1936.....	1,804	5,432	5,336	5,750
March,	1936.....	1,720	5,694	5,336	5,750
April,	1936.....	1,586	6,016	5,336	5,750
May,	1936.....	4,200	5,970	5,336	5,750
June,	1936.....	4,492	6,700	5,336	5,160
July,	1936.....	3,463	3,508	3,570	3,286
August,	1936.....	1,525	1,640	3,330	1,770
September,	1936.....	1,787	3,106	5,336	614
October,	1936.....	1,820	3,624	5,336	297
November,	1936.....	1,820	4,143	5,336	1,270
					100
	Salazar No. 2 Reservoir	Archuleta Reservoir	Hunter's Lake	Spruce Lake	
	Reservoir	Reservoir	Reservoir	Reservoir	
December,	1935.....	.....	.....	.....	.....
January,	1936.....	.....	.....	.....	.....
February,	1936.....	.....	.....	.....	.....
March,	1936.....	.....	.....	.....	.....
April,	1936.....	.....	.....	.....	.....
May,	1936.....	.....	110	97	48
June,	1936.....	.....	.....	.....	88
July,	1936.....	.....	.....	.....	.....
August,	1936.....	.....	.....	.....	.....
September,	1936.....	.....	.....	.....	.....
October,	1936.....	.....	0	0	0
November,	1936.....	.....	40	0	0
	Spruce Lake No. 2	Dude Ranch Reservoir	Road Canon Reservoir	Poage Reservoir	
	Reservoir	Reservoir	Reservoir	Reservoir	
December,	1935.....	.....	.....	.....	.....
January,	1936.....	.....	.....	.....	.....
February,	1936.....	.....	.....	.....	.....
March,	1936.....	.....	.....	.....	.....
April,	1936.....	.....	.....	.....	.....
May,	1936.....	.....	93	125	2,580
June,	1936.....	.....	.....	.....	70
July,	1936.....	.....	.....	.....	.....
August,	1936.....	.....	.....	.....	.....
September,	1936.....	.....	.....	.....	.....
October,	1936.....	.....	0	125	2,430
November,	1936.....	.....	.....	.....	187
May	1.....	.....	.....	.....	.....
November	1.....	0	621	.....	.....
		Lost Lakes Reservoir			
May	1.....	40	Chenoweth Lake	.....	.....
November	1.....	0	Spring Creek Lake	.....	.....
May	1.....	1,617	Wright's Lake or Spring Creek Lake	.....	.....
November	1.....	1,023	Ruby Lake	.....	.....
May	1.....	48	Fuchs Lake	.....	.....
November	1.....	0	Eastdale No. 1 Reservoir	.....	.....
May	1.....	0	Eastdale No. 2 Reservoir	.....	.....
November	1.....	0	Goin Lake	.....	.....
May	1.....	0	Hermit No. 1 Lake	.....	.....
November	1.....	0	Regan Lake	.....	.....
May	1.....	84,419	Humphries Reservoir	.....	.....
November	1.....	43,294	Grace Lake	.....	.....
May 1 Total storage.....					
November 1 Total storage.....					

ANNUAL REPORT OF IRRIGATION DIVISION ENGINEER
OF IRRIGATION DIVISION NO. 4 FOR 1935

Montrose, Dec. 1, 1935.

Mr. M. C. Hinderlider,
State Engineer,
Capitol Building,
Denver, Colo.

Dear Sir:

Herewith I submit the Annual Report of Irrigation Division No. 4 for the season of 1935.

At the opening of the irrigation season on April 1st, there was every indication that we were to have another dry season. The snow reports indicated an average of about 75% of normal. Due to the unprecedented dry season of 1934, the ground at all altitudes was unusually dry. However, during the month of April and the first part of May, there was an unusually heavy precipitation. The runoff, due to rather cold weather, came gradually, and as a result we had a long steady run of water. Our early run of water was short, because at moderate altitudes most of the snow water went into the ground instead of running off, as occurs under normal conditions, and as there was a great need of early water on account of ground conditions, this caused a good deal of trouble and much extra work in administration; but after the heavy run began, conditions improved rapidly.

The decision of the Supreme Court in the Park Reservoir case, fixed definitely the status of direct and storage flow; and it appeared that in the Grand Mesa area of Water District No. 40, some of the reservoirs would not be filled—especially as some late right ditches were running more water than ever before. However, by co-operative action between the water users and the water administration, the problem was solved, and the storage in that area was ample.

The dry season of 1934 was no doubt a great calamity; but I question whether the final results will not prove it a benefit. No amount of argument would have awakened the users to the needs of securing their rights promptly, as this has done. At present, Districts 40, 42, 59, 60, 63 and 68 have been opened for general adjudication. Petitions are being prepared for opening Districts 28 and 62. Users are realizing that they must have decrees for all water put to beneficial use if they are to have continued use of that water.

The U. S. Geological Survey has handled most of the hydrographic work of the Division. Several new gauging stations have been installed and old ones improved, and I feel that this has helped me a great deal in the difficult first year of my adminis-

tration. I desire to express my appreciation of this help, and the pleasure of my association with the men of that service.

Formerly, Mr. H. C. Getty, my predecessor, did a large amount of our hydrographic work. The fact that he did this and kept up his other work as he did, is splendid evidence of his ability and energy. My thanks are due him for the help he gave me both before and after his retiring from this office.

In Water District No. 42 on the north side of Grand Mesa, there are a large number of reservoirs located at high altitude in heavy snow country. The filling and running of these is at present left almost entirely to the caretakers employed by the owners. I understand that this is done as a matter of economy, to save the cost of an extra Deputy Water Commissioner. I am in full sympathy with any effort to save taxpayers money, but I question the wisdom of the present system. I believe that the filling of these reservoirs and their discharge measurement, should be done under orders from this department. One dam failure in that territory would probably cause an appalling loss of life and property, and over-filling is one of the most common causes of such failures.

I enclose reports from the Superintendents of the Uncompahgre Valley and Grand Valley Reclamation Projects in this Division.

Very respectfully yours,

FRED S. HOTCHKISS,
I. D. E. No 4.

UNCOMPAHGRE PROJECT, COLORADO

Season of 1935

Under the terms of the contract between the Bureau of Reclamation and the Uncompahgre Valley Water Users Association approved August 4, 1931, the operation and maintenance of the project was assumed by the Association on January 1, 1932.

The project irrigation system includes approximately 600 miles of canals and laterals and requires 1400 second feet of water entering the project during periods of peak demand.

The water supply for irrigation purposes did not quite meet the demand up to May 16, 1935. This was due to the cold, late spring but was really beneficial from the standpoint of water supply as it retarded the early spring run-off. From May 16 throughout the balance of the season there was sufficient water to meet the demand. There was no loss in crops reported due to the slight shortage of water in the spring. This shortage was handled by rotation on a basis of about 2 days off and 6 days on.

Water was delivered upon demand by the water user on an acre-foot basis. The lands generally on the west side of the Un-

comphahgre River were furnished 5 acre-feet of water for a minimum charge of \$1.65 per acre. Lands generally on the east side of the Uncompahgre River, which consist principally of adobe soils, were furnished 4 acre-feet of water at a minimum of \$1.32 per acre. Excess water was furnished at the rate of 20c per acre-foot for all water received in excess of 5 acre-feet per acre.

Operating conditions in the project canals and laterals were generally good throughout the irrigation season. No operating troubles were experienced in connection with the Gunnison Tunnel. The South Canal was shut off May 16 and 17 due to 30 linear feet of concrete sidewall collapsing. It was shut off again on July 25 and 26 due to the failure of a concrete culvert. Some trouble was experienced with sliding banks on hillside sections of the M&D Canal.

Generally excellent yields have been obtained by project farmers during the season of 1935 for all crops. Prices in general have been fair.

Fall weather conditions have been favorable for the harvesting of all crops.

There were 61,000 acres irrigated during the season. The average of principal crops was as follows: alfalfa 22,185 acres; sugar beets, 2,481 acres; Indian corn, 7,160 acres; oats, 4,703 acres; onions, 1,103 acres; potatoes, 4,373 acres; and wheat, 8,871 acres.

Appreciation is expressed to the office of the Irrigation Division Engineer of the State of Colorado for the efficient manner in which the diversion of waters in this section of the Western Slope have been administered.

IRRIGATION DIVISION NO. 4

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL
DITCH REPORTS, 1935

Dist. No.	Ditches Reported	No. of Priorities	Amount of Appropriation Cu. Ft. Sec.	Capacity of Canals and Ditches Cu. Ft. Per Sec.	Length of Canals or Ditches in Miles	First Day Water Was Used
28	60	71	606	1,683	202	Apr. 1
40	417	364	2,231	3,255	1,350	Mar. 1
41	33	73	2,437	3,262	289	Mar. 26
42	276	267	2,389	3,906	608	Jan. 1
59	150	169	760	1,979	251	Apr. 13
60	103	146	788	1,068	290	Jan. 1
61	11	32	62	94	53	Apr. 1
62	30	40	209	547	91	Apr. 13
68	177	189	775	946	236	Mar. 28
Totals	1,257	1,351	10,257	16,740	3,370	

Dist. No.	Last Day Water Was Used	Average No. Days Water Was Used	Average Daily Amount in Sec. Feet	No. Acre-Feet Used	No. Acres Can Be Irrigated
28	July 25	82			
40	Nov. 23	141	1,343	421,662	29,813
41	Oct. 31	..	..	565,894	236,781
42	Dec. 31	90	1,049	340,053	115,140
59	Oct. 21	91	1,368	269,043	174,413
60	Dec. 31	154	438	136,758	37,528
61	Nov. 15	177	30	10,460	72,749
62	Oct. 21	95	335	76,999	4,870
68	Nov. 15	55	419	66,125	16,850
Totals				1,980,556	27,362
					715,506

IRRIGATION DIVISION NO. 4

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL
DITCH REPORTS, 1935
CROPS IN ACRES

Dist. No.	Alfalfa	Natural Grasses	Orchard	Market Gardening
28	31	28,346	12,007	993
40	58,514	35,616	1,355	1,604
41	27,575	1,600	867	669
42	29,035	12,754	30	30
59	1,565	24,563	178	112,25
60	12,086.5	4,124.25	43.5	
61	1,771	352	30	17
62	1,360	6,550	21.25	30
68	3,914.5	8,823.75		41.25
Totals	135,852	122,729	14,531.75	3,496.50

Dist. No.	Potatoes	Cereals	Sugar Beets	Other Crops	Total Acres Irrigated
28	41	44	..	11,164	28,462
40	3,108	19,245	4,297	15,300	144,944
41	6,183	25,438	3,971	8,134	83,026
42	1,164	9,630	60	6,635	62,313
59	1,110.5	1,751	700	6,223.5	30,384.5
60	419.25	10,028	..	3,372	33,201.75
61	23	576	1	392	3,175.5
62	1,051	1,751	700	372	11,844
68	203.50	1,666.25	10	365.75	15,046.25
Totals	13,333.25	70,129.25	9,739	42,586.25	412,397.00

IRRIGATION DIVISION NO. 4

Dist. No.	Superintendence	Repairs	Improver- ments
40	\$ 11,055.00	\$ 35,438.00	\$ 600.00
41	16,225.00	18,475.00	11,950.00
42	12,052.50	51,046.50	15,081.50
59	2,185.00	5,247.00	2,294.00
60	2,413.50	10,318.00	5,062.44
61	275.00	60.00	.....
62	1,685.00	3,325.00	1,605.00
68	242.75	5,991.80	715.00
Totals	\$ 46,133.75	\$ 129,901.30	\$ 37,307.94

IRRIGATION DIVISION NO. 4

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL
RESERVOIR REPORTS, 1935

Dist. No.	No. in Dist.	Area of High Water Line, Acres	Capacity in Cubic Feet	Quantity of Water in Reservoir, May 1st	Quantity of Water in Reservoir Nov. 1st Cu. Ft.
40	152	3,462	2,002,837,263	1,813,248,984	56,034,520
42	69	1,980	685,124,179	.....	.....
60	5	395	222,844,719	.....	.....
Totals	226	5,837	2,910,806,161	1,813,248,984	56,034,520

Dist. No.	First Day Water Was Used	Last Day Water Was Used	Average No. Days Water Was Used	Average Daily Amt. in sec.-Ft.	No. Acre-Feet Carried
40	May 12	Nov. 30	150	134.4	40,340
42	May 13	Oct. 27	45	133.3	11,897
60	May 15	Aug. 22	46	48.2	4,441
					56,778

IRRIGATION DIVISION NO. 4

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL
RESERVOIR REPORTS, 1935

Dist. No.	Superintendence	Repairs	Improver- ments
40	\$ 3,685.00	\$ 2,175.00	\$ 2,109.00
42	1,455.00	2,217.00	709.00
60	.....	75.00	.....
Totals	\$ 5,140.00	\$ 4,467.00	\$ 2,818.00

ANNUAL REPORT OF IRRIGATION DIVISION ENGINEER
OF IRRIGATION DIVISION NO. 4 FOR 1936

Montrose, Dec. 15th, 1936.

Mr. M. C. Hinderlader,
State Engineer,
Capitol Building,
Denver, Colo.

Dear Sir:

Herewith I submit my annual report for the season of 1936.

The winter of 1935-36 began with more than the usual snowfall, and on March 1st it appeared that the runoff would be far above normal. However, from that time until the first of July, there was very little precipitation, and the spring snowfall in the mountains amounted to very little. Ground conditions, due to a series of dry years, were bad, and it seemed that we would have another short water season. However, summer rains overcame much of the shortage, and the final result was a splendid year. Mountain ranges were excellent and prices good, with heavy yields of all agricultural crops.

There was, of course, some shortage of water. Lands located on side streams coming from watersheds of low altitude, have always been, and are likely to remain with inadequate supply during certain periods. In many cases, these lands have water only during the flood season. Their owners endeavor, with only partial success, to make a soil storage. In some cases reservoirs have been constructed, but in many areas storage is impracticable.

The U. S. Reclamation Service, as a part of the investigation of the Colorado River water resources, has done extensive work in this Division the past summer. It is my understanding that they have made soil investigations and reservoir surveys covering many of the sites on which preliminary surveys were made under your orders three years ago, and that they have practically confirmed your findings. No doubt detailed reports of these surveys will be available later, but at present, so far as I know, they are not.

In Water Districts 28, 40, 41, 42, 59, 60, 62 and 68, general adjudications of water rights are being held, and probably a considerable number of new decrees will be granted at the conclusion of these hearings.

In order to secure a more accurate measurement of water, a considerable number of new measuring devices have been installed—practically all being Parshall flumes, built on plans furnished by your office. Wherever possible, I have given grades for these installations, and supervision to secure proper construction and adequate foundations.

All my installations have been made under free-flow conditions, and all have given splendid satisfaction. The Uncompahgre

Project has installed a number of small pre-east Parshall flumes which operate well under both free-flow and submerged conditions.

Under the Supreme Court decision as to the status of reservoirs, it has been necessary to require a more strict compliance with the law as to the installation of gage rods. Slope gage rods seem to be most convenient, and have been installed in about 20 reservoirs the past season.

There is apparently a growing tendency to consult our records, both of decrees and water use, to a larger degree than was formerly done, and I believe that we are securing more accurate records of both, each year. The necessity of covering large areas with little help, is a handicap that we cannot entirely overcome in this, but the men have done well.

The two Federal Reclamation Projects in this Division—the Uncompahgre Valley Project in Water District No. 41 and the Grand Valley Project in Water District No. 42, have had a good year. Extensive improvements have been made by the Uncompahgre Valley Project during the past year, including the construction of a new concrete chute to replace the drops formerly installed on the main canal; the commencement of construction of the Taylor Park Reservoir, which will hold, when completed, more than 100,000 acre feet of water, and prevent the recurrence of water shortage such as was experienced in 1934; and the beginning of construction of a drainage system in the Uncompahgre Valley which will reclaim a large area of seeped land, and largely prevent the increase of land seepage.

Mr. Jesse R. Thompson, Acting Superintendent of the Uncompahgre Valley Water Users Association, furnished the following statement regarding the Uncompahgre Valley Project:

**"UNCOMPAHGRE PROJECT, COLORADO
"Season 1936**

"Under the terms of the contract between the Bureau of Reclamation and the Uncompahgre Valley Water Users Association approved August 4, 1931, the operation and maintenance of the Project was assumed by the Association on January 1, 1932.

"The Project irrigation system includes approximately 600 miles of canals and laterals and requires 1400 second feet of water entering the Project during periods of peak demand.

"Although the snowfall in the hills showed a water content above normal, the water supply did not quite meet the demand. This was partly due to the early spring runoff, and partly to the dry condition of the subsoil. It became necessary to operate under a slight rotation from June 28th to July 11th, at which date rains in the hills increased the flow in the Uncompahgre River, and again

from July 22nd to Aug. 1st. From Aug. 1st to the end of the season there was sufficient water to meet the demand. There are no crop losses reported due to the slight shortage of water.

"Water was delivered upon demand to the water user on an acre-foot basis. The lands generally on the west side of the Uncompahgre River were furnished 5 acre-feet of water for a minimum charge of \$1.65 per acre. Lands generally on the east side of the Uncompahgre River, which consist principally of adobe soils, were furnished 4 acre-feet of water at a minimum of \$1.32 per acre. Excess water was furnished at the rate of 10c per acre-foot for all water received in excess of 5 acre-feet per acre.

"Operating conditions in the project canals and laterals were generally good throughout the irrigation season. No operating troubles were experienced in connection with the Gunnison tunnel. The South Canal was shut off from April 29 to May 1 due to the failure of about 125 linear feet of floor at end of chute near mile-post four.

"Generally excellent yields have been obtained by Project farmers during the season of 1936 for all crops. Prices in general have been fair.

"Fall weather conditions have been favorable for the harvesting of all crops.

"There were 60,446 acres irrigated during the season. The number of acres of each of the principal crops were as follows:

Indian corn.....	5,586	Potatoes	3,993
Onions	1,190	Sugar Beets.....	1,913
Alfalfa	20,991	Wheat	10,114
Oats	4,762		

"Appreciation is expressed to the office of the Irrigation Division Engineer of the State of Colorado for the efficient manner in which the diversion of waters in this section of the Western Slope has been administered."

Stream rating in the Division has been under the charge of the U. S. Geological Survey, under a co-operative agreement between the Survey and the State of Colorado. I appreciate very highly the benefit of this arrangement. The data secured have helped greatly in the administration of the water in the various streams rated.

I enclose a tabulation of the Water Commissioners' Ditch and Reservoir Reports.

Very respectfully yours,

FRED S. HOTCHKISS,
I. D. E. No. 4.

IRRIGATION DIVISION NO. 4

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL
DITCH REPORTS, 1936

Dist. No.	Ditches Reported	No. of Priorities	Amount of Appropriation Cu. Ft. Per Sec.	Capacity of Canals and Ditches, Cu. Ft. Per Sec.	Length of Canals or Ditches in Miles
28	75	541	1,701	202	
40	364	2,231	3,237	1,348	
41	126	3,003	3,306	617	
42	268	3,026	3,897	601	
59	152	720	2,075	180	
60	138	924	1,059	344	
61	33	69	107	55	
62	79	303	756	153	
68	190	696	915	240	
Totals	1,320	1,425	11,513	17,053	3,740

Dist. No.	First Day Water Was Used	Last Day Water Was Used	Average No. Days Water Was Used	Average Daily Amt. in Sec.-Ft.	No. Acres Feet Used	No. Acres Can Be Irrigated
28.....April 1	Aug. 1	84	502	170,644	29,951	
40.....Mar. 10	Nov. 15	235	1,248	415,285	219,670	
41.....Mar. 1	Oct. 31	154	1,450	604,302	91,164	
42.....Jan. 1	Dec. 31	98	1,850	695,615	211,882	
59.....April 20	Nov. 1	83	1,555	263,271	24,270	
60.....Jan. 1	Dec. 31	131	381	184,795	150,403	
61.....April 2	Nov. 15	144	22	6,877	3,684	
62.....April 15	Nov. 1	130	474	106,664	17,730	
68.....April 3	Nov. 15	55	411	65,209	28,882	
				2,512,662	777,636	

IRRIGATION DIVISION NO. 4

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL
DITCH REPORTS, 1936
—CROPS IN ACRES—

Dist. No.	Alfalfa	Natural Grasses	Orchard	Market Gardening	Potatoes
28	70	27,617	...	...	59
40	58,377	34,253	11,180	1,043	3,104
41	24,451	2,307	719	631	4,168
42	31,596	12,356	3,810	1,160	1,254
59	119	21,673	...	4.5	69
60	13,468.5	5,661	227	273.5	516
61	1,731	451	29	4	25
62	1,430	7,431	30	30	1,045.5
68	3,906.75	8,441.75	22.5	43.5	156.2
Totals	135,149.25	120,190.75	16,017.5	3,189.5	10,396.70

Dist. No.	Cereals	Sugar Beets	Other Crops	Total Acres Irrigated
28	45			27,791
40	19,836	4,327	11,695	143,815
41	24,460	2,215	9,154	68,105
42	10,688	788	56,533	118,185
59	5		118	21,988.5
60	11,528	219	6,551	38,444
61	402		142	2,784
62	1,699		2,256	13,921.5
68	1,756.25	21.5	200.25	14,548.7
Totals	70,419.25	7,570.5	86,649.25	449,582.7

IRRIGATION DIVISION NO. 4

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL DITCH REPORTS, 1936

Dist. No.	Superintendence	Repairs	Improvements
28			
40	\$ 10,475.00	\$ 35,385.00	\$ 400.00
41			
42	18,214.00	106,066.00	15,536.00
59	500.00	4,595.00	
60	1,350.00	16,832.00	3,163.65
61	550.00	209.00	25.00
62	1,635.00	4,555.00	125.00
68	238.00	5,692.00	225.00
Totals	\$ 32,962.00	\$ 173,334.00	\$ 19,474.65

IRRIGATION DIVISION NO. 4

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL RESERVOIR REPORTS, 1936

Dist. No.	No. in Dist.	Area of High Water Line, Acres	Capacity in Cubic Feet	Quantity of Water in Reservoir, May 1st	Quantity of Water in Reservoir, Nov. 1st Cu. Ft.
40	151	3,462	1,892,655,864	1,718,825,328	22,869,000
42	69	1,980	733,105,964	.....	.....
60	4	465	464,328,488	.....	.....
Totals	224	5,907	3,090,090,316	1,718,825,328	22,869,000

Dist. No.	First Day Water Was Used	Last Day Water Was Used	Average No. Days Water Was Used	Average Daily Amt. in Sec.-Ft.	Improve-ments
40	April 15	Nov. 21	189	1,032	35,735
42	April 13	Sept. 30	82	97	9,030
60	Jan. 1	Dec. 31	174	183	22,700
					67,465

IRRIGATION DIVISION NO. 4

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL RESERVOIR REPORTS, 1936

Dist. No.	Superintendence	Repairs	Improvements
40	\$ 2,555.00	\$ 1,100.00	\$ 900.00
42	1,701.00	775.00	1,876.00
Totals	\$ 4,256.00	\$ 1,875.00	\$ 2,776.00

ANNUAL REPORT OF IRRIGATION DIVISION ENGINEER
OF IRRIGATION DIVISION NO. 5 FOR 1935

Glenwood Springs, Colo., January 22, 1936.

Mr. M. C. Hinderliser,
State Engineer,
Denver, Colorado.

Dear Sir:

I herewith present my annual report as Division Engineer for the season of 1935, for Irrigation Division No. 5, in accordance with the provisions of the statutes of Colorado.

I am very happy to report a greatly improved condition during the season of 1935 over that which prevailed in 1934, and although we had only a moderate snow fall last winter, the moderate temperatures of early spring and summer prevented a wasteful runoff, and stream flow held up well until crops were matured, after which time some late rains in certain districts and the absence of freezing weather until a later date than usual made it possible for farmers to do more than the customary amount of fall plowing, and thus the outlook, in that respect is very flattering for favorable crop conditions in 1936.

There was very little snow fall in the division prior to January 3, but from that time to the present we have had in Glenwood Springs a fall of 43.5 inches, with moderate water content, and about the same amount at Aspen, Basalt and Carbondale, with a much less amount at points further down the Colorado River.

Because of the extreme dryness of 1934, the moderately favorable conditions of 1935 were only sufficient to mature the 1935 crops, leaving but little moisture stored in the subsoil to meet the crop needs of 1936. However, conditions are much more favorable than they have been at this date for many seasons past, and farmers are greatly encouraged at the present outlook.

The crop yields for 1935 were very satisfactory as to grains and alfalfa, with a fair yield of potatoes, while the sugar beet returns were very good—in fact, the per acre tonnage in these areas was the greatest ever known in the history of the industry in this territory.

Not only was the crop yield better in 1935 than in the previous four years but the prices the farmers received for their products were very satisfactory, in pleasing contrast to the fact that the past few years their commodities have brought them less than the cost of production. Hogs, sheep and cattle have brought good returns on the market, while hay, grain and potatoes have met a slow market with only fair prices. The farmers have made

a good showing by way of reducing their indebtedness, and are facing the future with hope and confidence.

The past summer applications have been made in three water districts in Division No. 5, numbers 37, 38 and 70 for general adjudications, the petitioners being present water owners who are asking for additional water, and that their priority dates be set back to the date of their original adjudications. Land surveys have been made and some of the evidence has been presented, but the courts have not yet passed on these applications although it is believed that decrees will be entered within the next few weeks.

One action that is causing considerable interest among water users is the recent filing of a petition by the Twin Lakes Irrigation and Canal Company which asks for a diversion and decree for 625 second-feet from the headwaters of the Roaring Fork River, and delivery by means of a tunnel under Independence Pass to Twin Lakes, for later diversion to the Arkansas River for use on the lands of the company near Ordway, Colorado.

Final testimony in this case was submitted January 16 to Judge John T. Shumate, who ordered the case continued for thirty days at the request of the attorneys, who are to prepare the decree for his approval. The first trans-mountain diversion of this company was made October 1, 1934, and the heaviest made thus far was on June 15, 1935, when their tunnel carried 344 second-feet, but as their measuring device is set at their east portal, which is in Division No. 2, I will leave it to Mr. Beach to make further report on this project.

Aside from the above project by the Twin Lakes Company there has been practically no construction or development work in the division during the past year, but operating ditches have been kept in good repair, and up to their full carrying capacity.

Efforts have been made by our people to induce the Federal Government to render some financial assistance toward the construction of two much-needed projects in Garfield County, one a reservoir at the head waters of Divide Creek and the other for a ditch from Elk Creek to carry a large flow of water from that stream westward to unite with and supplement Grass Mesa canal from Rifle Creek.

Although both of these projects are worthy and their construction would add much to the prosperity of two very fertile areas, all efforts to secure the funds necessary for their construction have thus far been unsuccessful. The construction of these and other worthy and feasible projects within the division would do much to increase the productivity and prosperity of a vast section, rich in agricultural possibilities if supplied with adequate moisture, and we are still hoping that some federal assistance may yet be provided to bring about this desirable end.

Several Venturi flumes were installed in 1935, and I am quite sure that by their use we have avoided a lot of disagreeable

controversy over water measurements. One Caleo Meter-gate, the only one I know of in the division was installed last June in the West Divide ditch, and the owners appear to be well satisfied with it. I checked it with a current meter and I am sure it can be depended on for accuracy. I know of two more of these devices that have been purchased and delivered for spring installation.

The usual difficulties and small disturbances confronted me during the past season, but nothing of a real serious nature, and for once we made our way through the season without litigation.

I was disappointed that we were obliged, for financial reasons, to forego the usual meeting of division engineers with the State Engineer, as I feel sure that these sessions have always proved very helpful to the service.

As the senior member of your staff of division engineers in point of service, and, as I believe, also in age, I am thankful for many courtesies and much helpful advice from your office, and I beg to remain

Yours very truly,

A. J. DICKSON,
Division Irrigation Engineer, Irrigation Division No. 5

SUMMARY FOR DIVISION NO. 5—1935
TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL
REPORTS FOR 1935

District No.	4	5	6	8	9	10
	Amount of Appropriation Cu. Ft. Per Second	Capacity of Canals	Length of Main Ditch in Miles	First Day Water Used from Natural Stream	Last Day Water Used from Natural Stream	No. of Days Water Carried from Natural Stream
37.....	1,244	1,145	320	May 1	Oct. 1	145
38.....	900	1,237	319	Mar. 1	Oct. 1	109
39.....	465	528	185	Mar. 1	Oct. 31	154
45.....	713	903	223	Mar. 1	Oct. 1	76
52.....	143	235	54	Apr. 1	Oct. 15	55
53.....	268	389	125	Apr. 8	Oct. 15	126
70.....	325	240	86	Apr. 1	Oct. 31	155
Totals.....	4,058	4,677	1,312	11	12	13
				14	15	16

District No.	Average Daily Amt. of Water Used During Season (Per Sec.) from Natural Stream	No. of Acre-Fr. Used by Cana- rian Season from Natural Stream	Total Number Acres That Can Be Irrigated	Alfalfa	Natural Grasses	Cereals
37	767	227,280	27,516	11,456	7,935	3,386
38	868	130,590	35,018	19,572	4,974	7,020
39	318	99,806	...	8,919	3,983	2,692
45	223	59,861	...	16,934	5,244	5,712
52	118	12,742	9,320	1,485	2,696	2,96
53	221	58,685	18,130	4,575	8,170	595
70	123	39,770	15,570	4,957	203	1,001
Totals		628,734	105,554	67,898	33,205	20,702

CROPS IRRIGATED FROM CANAL IN ACRES

District No.	CROPS IRRIGATED FROM CANAL IN ACRES					
	17	18	19	20	21	22
37						
38						
39						
45						
52						
53						
70						
Totals	154	57	328	2,720	134	325
	1,238	389	6,999			
	Orchards	Market Gardens	Potatoes	Sugar Beets	Beans	Peas
	4	162	1,460	2,040	80	53
	52	109	3,448	680	15	15
	52	61	1,176		39	12
			355			
			42			
			190			

ANNUAL REPORT OF IRRIGATION DIVISION ENGINEER
OF IRRIGATION DIVISION NO. 5 FOR 1936

Glenwood Springs, Colorado, December 10, 1936.

Mr. M. C. Hinderliser,
State Engineer,
Denver, Colorado.

Dear Sir:

In accordance with the requirements of the law, I hereby submit for your consideration a report of my activities as Irrigation Division Engineer for the season of 1936.

While the snowfall of the Winter of 1935-6 was apparently heavier than usual, at least for the past few years, it was lacking in density and water content, and disappeared earlier than expected in the Spring. Although there was really no Spring runoff, practically the entire amount of moisture stored in the high mountain areas being absorbed by the soil as fast as it melted, to re-appear later in the season to the benefit of the small streams, although not in such quantity as to cause any torrential alarm.

The U. S. Weather Bureau reports the precipitation at Glenwood Springs for the 12 months beginning December 1, 1935, and ending November 31, 1936, to be 17.04 inches, which I believe is a little in excess of the average precipitation of the past few years.

By reason of the consequent uniformity in stream flow, the crop production throughout the division was very satisfactory. However, this statement should be qualified to some extent, for in the Divide Creek section in District 45 and in the Roan Creek area in District 70 there was a real shortage in the latter part of the season and crops suffered severely, especially where cultural methods early in the season had been somewhat faulty.

In District 39 there was less trouble and complaint than usual, although the territory known as the Antlers Mesa, and watered by the Grass Valley canal and reservoir suffered severely, and very light crops were raised in this area. This was due to the almost complete absence of Summer precipitation, and a shortage of flow in Rifle Creek which made it necessary to curtail the supply to the canal at the time when it was imperatively needed for crop production.

Other sections than these above mentioned were fairly well supplied, gave us little trouble and report crop yields that are almost or quite normal.

In District 38 crop yields were good to excellent, and less attention was required from our force than for several years

past, and we dispensed with the services of one deputy water commissioner entirely. This is the District in which, in addition to hay and grain, the farmers depend largely on potatoes for their cash crop. The commissioner's report shows an acreage this year of 3,460 acres, and with yields running from 100 to 200 sacks of 115 pounds to the sack, bringing the growers from \$1.25 to \$2.00 per 100 lbs., and with the good prices that have prevailed for livestock, the return to prosperity by our farmers should be easily understood. This prosperous condition extends also to District 37.

The same satisfactory condition maintains in District 39, except that the farmers of that District are growing an additional crop—sugar beets—with marked success, and a very satisfactory degree of profit.

Sheep on the higher areas of the U. S. forests and cattle at the lower altitudes, put on growth and flesh in a very satisfactory manner this year, as the Summer pasturage was as good as usual, and I think somewhat better than average, leaving the farmers quite elated over the result of their industrial efforts.

In my last year's report I referred to three general adjudications that were in the process of making in Division No. 5. Since then the general decree for No. 38 has been issued, but as I only received my copy about October 1st, no attention was paid to it this year. A general decree was recently announced by Judge Luby for District 37, but this has not yet been compared and corrected, and it will probably be sixty days before copies are available. We are expecting that a similar decree covering District 70 will be issued in the near future—in time to be effective for next season.

I also made mention in my 1935 report of two much-needed projects, in the construction of which the aid of the federal government was being sought. In addition to these, the Haystack Mountain project on Divide Creek and the Elk Creek undertaking in District 39, efforts are being made to secure government aid for a reservoir project on Roan Creek, in District 70. While these projects are all worthy, and would mean much to the country, to what extent our efforts will meet with success, only time will tell.

The Sumers reservoir at the head of Three Mile Creek was greatly improved this Fall by raising the rip-rapping and by lowering the spillway, and the dam to the Von Spring reservoir, which washed out last year, was rebuilt this Fall, and aside from this and the installation of considerable pipe and metal flume, there has been but little improvement in irrigation plants the past year.

Through the kindness of C. W. Beach, of Pueblo, Division Engineer of Division No. 2, I am able to report the following trans-mountain diversions from Division No. 5 to Division No. 2:

Twin Lakes or Independence Pass project, taking water from the Roaring Fork	23,350 acre-feet
Busk-Ivanho tunnel from the Frying Pan	7,246 acre-feet
Wurtz ditch from Eagle by Tennessee Pass	3,762 acre-feet
Ewing Ditch from Eagle by Tennessee Pass	536 acre-feet
Columbine Ditch from Eagle River.....	1,801 acre-feet
Climax Ditch from Blue River.....	1,908 acre-feet

Having filled this position for almost twenty-eight years without taking or requesting a vacation, being available at all times except when incapacitated by unavoidable illness, and desiring a more quiet life than is possible or compatible with the job, I recently made application for retirement, effective the last of this month.

Fully appreciative of the fine treatment always accorded me by your office, and grateful for the privilege of having served the good people of my division, I feel that the time has now come for me to say GOOD-BYE.

A. J. DICKSON,
Irrigation Division Engineer, Irrigation Division No. 5.

SUMMARY FOR DIVISION NO. 5—1936

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL REPORT FOR 1936

District No.	4	5	6	8	9	10
37.....						
38.....						
39.....						
45.....						
52.....						
53.....						
70.....						
Totals.....	3,744	4,490	1,070			
Average Daily Amt. of Water During Season (Cu. Ft. Per Sec.) from Natural Stream	11	12	13	14	15	16
37.....						
38.....						
39.....						
45.....						
52.....						
53.....						
70.....						
Totals.....	652,345	116,508	64,114	30,078	20,596	
Average Daily No. of Acre-Feet Used by Canal for Season from Natural Stream	17	18	19	20	21	22
37.....						
38.....						
39.....						
45.....						
52.....						
53.....						
70.....						
Totals.....	1,327	544	6,806	2,498	111	
Cabbage	23	24	25	26	27	28
Other Crops						
37.....						
38.....						
39.....						
45.....						
52.....						
53.....						
70.....						
Totals.....	2	1,346	129,023	\$ 21,130	\$ 548	
Superin- tendence						
Repairs						
Improve- ments						

ANNUAL REPORT, IRRIGATION DIVISION ENGINEER,
IRRIGATION DIVISION NO. 6 FOR 1935

Steamboat Springs, Colorado, November 30, 1935.

Mr. M. C. Hinderliser,
State Engineer,
Denver, Colorado.

Dear Sir:

I herewith submit annual report, Irrigation Division No. 6 for 1935.

This year, 1935 is the fifth consecutive year that this Division has had a water supply below normal. However, conditions this year showed a marked improvement over 1934. Above normal temperature prevailed with sub-normal precipitation, generally crops were good.

The most noticeable situation has been the gradual decrease of ground water and increased demand, consumption and duty of water.

Administration difficulties and problems the past season, were confined principally to local communities and individual streams. Following the early run-off, both the Little Snake and the Yampa Rivers and all tributaries thereto excepting Elk River, had inadequate direct flow to supply all demands.

The first use of water for direct irrigation was reported in District 58, starting April 1st. Irrigation was then more or less continuous up to October 30th, where water was available.

The winter of 1934 and 1935 was comparatively mild and open. However, with but few exceptions, all reservoirs were filled or nearly filled before water was demanded for direct irrigation. The demand for direct irrigation interfered only with storage in the Simon Reservoir No. 1 on Hunt Creek and the D. D. & E. Reservoir on Milk Creek, each of these reservoirs filled only to about fifty per cent of their capacity.

Five river gaging stations were maintained. Forty-six discharge measurements made thereon. Heavy runoff occurred the latter part of May and early June, decreasing rapidly the latter part of June. During July, August and September all streams were below normal.

During the early part of the season, temperatures and climatic conditions were favorable for planting and early working of the soil although temperatures averaged slightly below normal. Heavy snow fall the latter part of April, an abundance of rain in May, made ideal conditions for starting of crops. The soil which was previously very dry, became well saturated.

The growing season was favorable throughout, June being

about the average. Unusually warm weather during July and August and continuing well into September, which was excellent for growing and maturing of the crops.

Precipitation, while generally below normal, light rains were well distributed and a valuable assistance to irrigated crops as well as to dry farming.

Cost of administration by Water Commissioners for 1935 is shown by the following tabulation.

Dist. No.	No. of Decrees	Water Comm. Salary	Deputy Salary	Total
43	398	\$ 402.00	\$ 495.00	\$ 897.00
44	255	984.00	.....	984.00
54	74	234.00	.....	234.00
55-56		No water commissioners		
57	143	.....	965.00	965.00
58	395	978.00	790.00	1,768.00
Totals	1,265	\$2,598.00	\$2,240.00	\$4,848.00

ADJUDICATIONS OF PRIORITY RIGHTS FOR THE YEAR 1935

Water District No. 44

Ditch or Reservoir	Stream	Amount c.f.s.
Wolf Ditch.....	Little Bear Creek.....	0.92
Beaver Ditch.....	Little Bear Creek.....	.33
Baker Cottonwood Ditch.....	Little Cottonwood Creek.....	2.20
Millspaugh Ditch.....	Fortification Creek.....	1.66
Pyramid Ditch.....	Pyramid Creek.....	.40
	Total	5.51

Water District No. 54 (Wyoming)

West Side Canal and Chris- tensen Ditch.....	Little Snake River.....	5.06
Van Horn Bros. Ditch.....	Tennessee Creek.....	.66

Water District No. 58

Simon Mutual Ditch & Reser- voir Company		
Simon Reservoir No. 1.....	Hunt Creek.....	35,406,608 cu. ft.
Murphy Enl. and Ext. of the Hoover & Jacques Ditch.....	Elk River.....	2.98 c.f.s.
Heart Lake Reservoir.....	Watson Creek.....	12,330,098 cu. ft.
Hill Ditch.....	Watson Creek.....	1.75 c.f.s.
C. & H. Maybury Ditch.....	Mill Creek.....	2.33 c.f.s.
Enl. Lower Pleasant Valley.....	Yampa River.....	.54 c.f.s.

While temperatures were slightly below normal during October and November, however harvesting and threshing of grains were accomplished without difficulty or loss. Excess precipitation during these months being advantageous to the soil, these early snows melted, saturating the ground and showed a very slight increase in runoff.

The water commissioners' reports show only a slight decrease in acreage planted to head lettuce and vegetables. However, there is a marked decrease in the car load shipments of these crops. This was due primarily to the market conditions, and not to crop failure.

The season's shipments of head lettuce showed 124 cars shipped, the average price to the growers was about 60 cents per crate net.

Four cars of spinach were shipped. Averaging one cent per pound net to the growers.

Ten cars of carrots were shipped, which averaged 70 cents per crate net to the growers.

Only one car of potatoes has been reported shipped to date, averaging net to the growers 45 cents per cwt.

Up to the present date it is estimated that around 80 cars of baled hay have been shipped out. The average price to the growers has been \$5.00 per ton net in the stack.

The establishment of a cheese factory at Steamboat Springs has encouraged an increase of, and better dairy herds. It is expected that through this industry, more hay will be consumed locally.

Considerable work has been accomplished during the season in the improvement of existing reservoirs and ditches.

Organization of Districts and preliminary surveys have been completed, preparatory to the construction of reservoirs on the upper Yampa River.

There has been considerable agitation among water users along the Colorado-Wyoming line on the Little Snake River, who want some sort of an inter-state agreement or compact between the states on the administration of the waters of the Little Snake River to the various decrees involved. There is at this time considerable conflict among these ditches. This office has advised the water users who have appealed for aid in this matter to apply to the State Engineers in both states for the purpose of negotiating an inter-state compact concerning the use of the waters of the Little Snake River.

Respectfully,

B. T. CHASE,
Irrigation Division Engineer, Division No. 6.

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL
DITCH REPORTS FOR THE IRRIGATION SEASON OF 1935
IRRIGATION DIVISION NO. 6

	Dist. No.	No. of Ditches Reported	Amount of Appropriation Second-Foot	Capacity of Canals Second-Foot	Length of Ditches, Miles	First Day Water Was Used	Last Day Water Was Used
43	178	664.74	1,308.00	268.26	4- 5	9- 5
44	200	675.82	886.50	271	5- 1	10-17
54	56	140.03	175.56	.....	4-24	7-25
55						
56						
57	74	337.45	345	180.50	3-25	10-25
58	377	1,119.97	1,695	430.55	4- 1	10-30
Totals	885	2,938.01	4,409.06	1,150.31		

Note: No water commissioners for Districts No. 55 and 56

	Dist. No.	Average No. Days Water Was Carried	Average Daily Amount Carried Second-Foot	No. of Acres-Feet Used	Total Acres That Can Be Irrigated	Alfalfa	Timothy Natural Grass
43	63	636.93	99,786	34,992	14,968	8,187
44	35	334.42	36,709	30,440	11,683	10,166
54	51	116.16	16,151	9,171	955	4,579
57	88	165.73	37,683	18,334	505	12,090
58	82	626.46	143,306	63,183	85	45,806
Totals	1,879.70	333,630	156,120	28,196		80,828

	Dist No.	Cereals	Orchards	Market Gardens	Potatoes	Lettuce	Beans	Peas
43	2,780	...	2	...	...	...	...
44	3,856	3	1	162	...	5	0.5
54	170	1	...	15	...	...	...
55	No report						
56	No report						
57	40	...	...	...	...	...	...
58	1,597	76	408	398	556	5	0.5
Totals	8,443	80	411	575	556	5	0.5

	Dist. No.	Cabbage	Other Crops	Total Irrigated	Superin-tendence	Repairs	Improve-ments
43	500	26,437	\$ 640.00	\$ 3,370.00	\$ 175.00	
44	1	283.5	26,161	.....	4,365.00	2,135.00
54	5,720	.....	.....	2,660.00
55	No report					
56	No report					
57	12,635	.....	960.00		2,275.00
58	3.5	120.5	49,050	.....	4,110.00	655.00
Totals	4.5	904	120,003	\$ 640.00	\$ 12,805.00	\$ 7,900.00

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL
RESERVOIR REPORTS FOR IRRIGATION SEASON OF 1935
IRRIGATION DIVISION NO. 6

Dist. No.	No. of Reservoirs Reported	Area of High Water Line Acres	Capacity in Cubic Feet	Quantity of Water in Reservoir May 1, Cu. Ft.	Quantity of Water in Reservoir Nov. 1, Cu. Ft.	First Day Water Used
43	1	6.87	3,811,608	3,811,608	16,100,000	6-22
44	12	245	71,964,719	34,701,000	.....	5-22
54	1	30	17,354,832	8,677,416	.....	7-1
55-56	No report					
57	21	415	149,396,715	49,076,145	.....	6-24
58	47	607	127,547,510	48,454,925	3,181,885	6-15
Totals	82	1,303.76	370,075,384	144,721,094	19,281,880	

Dist. No.	Last Day Water Used	Average No. Days Water Carried	Average Daily Amount of Water Carried Second Feet	No. of Acre-Feet Reservoir Water Carried	Supplemental supply Luney Ditch	Natural Grass	Cereal
43	7-2	10	4.00	80	.....	.....	180
44	10-10	17.5	16.50	529	575	580	.....
54	8-3	.....	.....	.....	.....	.....	.....
55-56	No reports	.....	.....	.....	Supplemental supply to Riley Livestock Co. Ditch	.....	.....
57	10-9	22	9.03	436.12	400	90	.....
58	9-14	10	36	977.00	20	693	70
Totals	.....	.....	.....	2,220.12	995	1,363	250

Dist No.	Market Gardens	Potatoes	Other Crops	Total Irrigated	Repairs	Improvements
43	.....	2	11	1,348	\$ 337.00	\$ 600.00
44	.....	.....	.....	.....	.....	.....
54	.....	.....	.....	.....	.....	.....
55-56	No reports	.....	.....	.....	.....	.....
57	.....	.....	.....	490	.....	.....
58	176	10	11	969	110.00	210.00
Totals	176	12	11	2,807	\$ 447.00	\$ 810.00

REMARKS

District No. 43 has five reservoirs in use. Water Commissioner reports only one reservoir 1935.

Two reservoirs in District No. 44 not in condition for storage in 1935.

Two reservoirs in District No. 54. Gold Blossom Reservoir not included with this report.

One small reservoir in District No. 56.

District No. 57 has five additional reservoirs, all unfit for storage in 1935. Of the 47 reservoirs reported, only 27 were used for irrigation in District No. 58 in 1935.

Quantity of water stored in reservoirs May 1st, in Division No. 6 was 40% of the total capacity of such reservoirs.

Quantity of water stored in reservoirs May 1st..... 3,320 acre-feet

Quantity of water stored in reservoirs Nov. 1st..... 443 acre-feet

Quantity of water available in reservoirs for irrigation..... 2,877 acre-feet

No. of acre-feet of reservoir water carried..... 2,220 acre-feet

No. of acre-feet unaccounted for, evaporation, etc..... 657 acre-feet

ANNUAL REPORT IRRIGATION DIVISION ENGINEER,
IRRIGATION DIVISION NO. 6 FOR 1936

Steamboat Springs, Colorado, November 30, 1936

Mr. M. C. Hinderlader,
State Engineer,
Denver, Colorado.

Dear Sir:

Herewith submit annual report Irrigation Division No. 6 for 1936, together with tabulation of Water Commissioners' Annual Ditch and Reservoir Reports for the season.

Administration problems, as in 1935 were confined primarily to tributaries of the main rivers and affecting all water districts excepting District No. 55.

These problems and controversies were in most instances more acute and trying this year and of a more serious nature, due principally to inadequate water supply together with the climatological conditions, etc.

A heavy early runoff of the snow deposits upset what was expected to be a near normal water supply for irrigation. The results were, throughout the division the water situation was acute as pertaining to all tributaries, this situation started in a general way June 1st to 15th and continuing throughout the irrigation season, or as long as any water at all was available for irrigation.

Of these conditions the most serious and acute shortage occurred on Piceance Creek, a tributary of White River.

Fortification Creek, Morapas Creek, Milk Creek, Elk Head Creek, Wilson Creek, Morgan Creek and Good Spring Creek in District No. 44.

Willow Creek and Four Mile Creek in District No. 54, Deep Creek, Hunt Creek, Oak Creek, Watson Creek and other various small tributaries in District No. 58.

In District No. 43 early in June a complaint was made by certain water users on Piceance Creek, regarding the manner of administration of their properties by the water commissioner and his deputy. After an extensive investigation into this situation drastic orders were issued to the water commissioners on the administration of these mentioned priorities covering Piceance Creek and all tributaries thereto.

The complaints on Piceance Creek were directed primarily against the efficiency and integrity of the water commissioner and his deputy. Careful investigation revealed that the water commissioner was not to blame and acted in good faith.

There was, however, some questionable actions on the part

of the deputy water commissioner who was placed upon Piceance Creek, and had direct charge of the administration of water to the ditches. This particular deputy is now out of the service.

Drastic measures were necessary covering the administration of Stake Springs Creek, a tributary of Yellow Creek.

The principal dissatisfaction arising on the administration of decrees in District No. 44 was primarily the fault of the water commissioner therein, who persisted, as in the past, to make his own rules and dictate policies of his own making. He would not confine his activities to his duties as prescribed by the statutes.

Complaints of this nature, that were brought to the attention of this office, were corrected and the necessary instructions and orders were sent to the water commissioner. Fortunately none of his inappropriate actions have resulted in any very serious consequences, to date.

The administration in Districts No. 54, 57, 58, were conducted smoothly by the water commissioners therein, with but few complaints of a minor nature being appealed to this office.

Copies of all orders and correspondence in connection with each of these numerous complaints, not heretofore forwarded to your office, are filed in this office.

Water Supply and Resultant Effects Upon Crop Production, Etc.

The main streams, that is, the Yampa River in Districts 58, 57 and 44, White River, District No. 43, Little Snake River in District No. 54 and 55, each supplied sufficient water for all demands, this situation contributed to by nearly normal snow deposits and conditions in the higher altitudes drained by these streams. While each of these rivers had an early heavy runoff, and an early diminishing flow, starting the first part of the irrigation season, there was sufficient late water, combined with return flow to care for the demand and needs for direct irrigation to all ditches diverting therefrom.

All ditches diverting water from the above mentioned main streams, however, do not cover two-thirds of the irrigated area in the Division, the other one-third being diverted from tributaries deriving their water supply from snow deposits of lower altitudes, springs, and storage reservoirs located thereon.

The water supply on all such tributaries was considerably below normal, during the irrigation season. The snow deposits in general on such tributaries were somewhere near normal.

However, the early and heavy runoff in same, which could not be held back in storage, resulted in a marked deficiency for direct flow application during the irrigation season and more especially when it was most needed.

A Summary of This Condition by Districts Is As Follows:

District No. 43. The total acreage irrigated approximately the same as in the past with no variation in crops.

All crops irrigated from ditches diverting water from White River considered normal. The average condition on all tributaries of the White River, the crops are considered to be one-third to more deviation below normal.

District No. 44. The total acreage irrigated remains approximately the same as in former years. All crops irrigated by ditches diverting from the Yampa River, water supply adequate and crops considered normal. More than 80% of the irrigated acreage in District No. 44, however, is irrigated from tributaries on the Yampa River. All these tributaries, with the exception of Williams River, supplied less than 30% of the demand for direct irrigation water this year, and the effects on the crops under such streams are considered to be about 50% of normal.

There being no water at all for irrigation in the majority of such tributaries after June 15th to 30th, therefore, crops under these streams received adequate irrigation for about the first one-third of the irrigation season.

District No. 57. This year was considered about a normal year as to water supply in this district. Practically 90% of the acreage being under the Yampa River and storage reservoirs from early runoff of small tributaries.

Junior appropriations on Fish Creek were cut off from June 1st to 10th, however, without material injury to the crops.

Trout Creek supplied all demands for the season by careful administration.

District No. 54. The Little Snake River water supply was adequate to supply all demands for three-fourths of the irrigation season. This shortage however did not affect the Colorado irrigators on the river before the same leaves the Colorado-Wyoming line. However, the ditches diverting from the river after the same again enters Colorado are not so fortunate on account of heavy diversions in the State of Wyoming.

The water supply of Four Mile and Willow Creeks was around 50% of normal; that is, during the irrigation season, insufficient water was available in these streams. After June 10th and after July 15th the only water in Willow Creek was being turned out by Elk Lake Reservoir for use in Riley Livestock ditch.

The shortage on these creeks resulted in a heavy crop loss under all other ditches, estimated to be about 50% of normal.

District No. 58. Approximately 85% of the acreage irrigated in District No. 58 is under ditches diverting direct from the Yampa and Elk Rivers, which water supply was adequate with careful administration, to supply all demands thereon. The water supply of these streams was about normal.

A decided shortage, however, was noted on all tributaries. A sudden drop occurred over tributaries starting the middle of June and by July 1st to 15th practically no direct flow was available for irrigation, which resulted in an estimated one-third loss to crop production.

Fairly well distributed showers during June and July were of some benefit to these crops, otherwise the irrigation shortage effect upon the crops would have been greater.

During June the precipitation averaged 1.40 and July the average was 1.70 inches.

Climatological Conditions and Resultant Effects Upon Crop Production, Etc.

All crops where irrigation water was adequate or nearly so, and properly applied. It is noted that the climatological conditions in the past season showed beneficial results as to crop production and the quality of the same.

Cereals were well matured and ready for harvesting at the proper time. Hay was of better quality and of average production. Potatoes were of an improved quality with a heavier production. Vegetables and other crops showed an improvement over past seasons both as to production and quality.

In practically all instances where a shortage of irrigation water was experienced, the results to crops by climatological conditions, however, were the reverse.

Production in comparison to normal seasons, on a whole, was about one-third less. Quality of these crops is not up to normal. However, in certain sections the dry land crops were almost normal, while in others they were almost a complete loss.

It is my opinion, based upon a study of conditions of the past season and comparisons with normal years, that the shortage of water for irrigation is the main factor in crop production, etc., and the climatological conditions such as were experienced the past season were a benefit to such crops, and only detrimental to crops with insufficient irrigation water.

Throughout the growing season the temperature averaged about 5 degrees above normal in the division, with considerable more sunshine than normally and with a corresponding deficiency in humidity.

Exceptionally favorable harvesting conditions were experienced this fall.

Reservoirs

Reservoirs in District No. 58 were filled to 80% of capacity May 1st, 1936. This is an increase of about 50% over the same date in 1935.

The 1936 20% shortage was contained principally in Garde-

ner Park Reservoir and the Simon Reservoirs, each being filled to two-thirds of their total capacities.

The Simon Reservoir No. 1 was used only to one-third of the amount of water stored in same on May 1st, amounting to approximately 400 acre feet. The total amount being diverted therefrom for irrigation being 560 acre feet, the amount stored in reservoirs after May 1st totaled 260 acre feet. Therefore the total amount used totaled 660 acre feet, or a little more than half the total capacity.

Reservoirs in District No. 57. Only one reservoir, the J. M. Yoast, was filled by May 1st. All other reservoirs in District No. 57 were filled or nearly filled between May 1st and May 15th and prior to any demand by ditches.

Ground Water Situation, Duty of Water, Etc.

It is noticeable both by observation and study the gradual decreasing quantity of ground water over the past few years, and the gradual increasing demand on irrigation water over the same period, that is, in quantity of water supplied per acre, above normal temperature conditions, sub-normal precipitations, applying more particularly to snow depths, both factors in below normal and earlier runoff. These conditions have increased the amount of water necessary to produce the same results on crop productions. While no accurate figures are available, the past season crops required 50% more irrigation water to produce the same results of several years past. This increase is due largely to the length of time that water was used. Ground water and springs have gradually diminished until some springs that were formerly considered a reliable source of supply throughout the year have become dry or flowing only a small per cent of their normal flow, leaving creeks with priorities depending upon such supply without irrigation water the greater part of the irrigation season. For example: Piceance Creek, Yellow Creek and all similarly located creeks are supplied almost entirely by springs and underground flow following a very early runoff from snow and early spring rains.

The flow in these creeks has diminished to the extent that not more than 10% of the water is now available that has been used in years prior to 1932.

Statements on Crop Productions

From the Yampa section 105 cars of lettuce were shipped this season, average price to growers about \$1.50 per crate. Five cars of spinach, average about 1½ cents per pound. Twenty cars of potatoes, average \$1.30 per cwt. Less than 300 acres of lettuce was planted this year, which is about 20% of the maximum acreage planted in former years. Indications are that next year will see a much larger lettuce and vegetable acreage than any heretofore for the Yampa district.

The Sidney Valley section has already shipped 50 cars of potatoes at prices ranging from \$1.50 to \$1.60 per cwt. Farmers in this vicinity have been getting \$1.33 for oats sacked and \$1.30 loose. Several cars of oats have already been shipped. Baled hay is being shipped at this time in large quantities.

Taking all into consideration, water supply, climatological conditions, crop production, marketing and prices received for produce, this past season has been a decided improvement over the past several years.

Respectfully submitted,

B. T. CHASE,
Irrigation Division Engineer, Division No. 6.

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL
DITCH REPORT FOR THE IRRIGATION SEASON OF 1936

	Dist. No.	Number of Priorities Reported	Amount of Appropriation Cu. Ft. Per Sec.	Capacity of Canals	Length of Main Ditch, Miles	Length of Laterals, Miles
43		76	643.25	1,014.93	195.60	26.85
44		197	463.17	579.00	193.50	32.00
54		41	127.42	219.50	...	...
55						
No water commissioner						
No water commissioner						
57		79	365.78	396.50	151.50	...
58		280	1,104.11	1,596.00	397.00	...
Totals	673	2,703.83	3,805.90	937.60	58.85	

	Dist. No.	First Day Water Was Used	Last Day Water Was Used	Average No. of Days Water Carried	Average Daily Amount of Water Carried	No. of Acre Feet Used for Season	Total No. of Acres That Can Be Irrigated
43		3	5	5	582.57	94,270	30,224
44		4	1	5	333.00	38,073.66	23,745
54		4-28	1	5	108.50	14,087	6,975
57		4-28	1	5	213.98	46,502.46	15,891
58		4-1	11-15	110	652.64	142,682.57	65,382
Totals	...			1,890.69	335,615.70	142,217	

	Dist. No.	Alfalfa	Natural Grass	Cereals	Orchards	Market Gardens	Potatoes
43		12,548	7,485	2,785	121	278	129
44		10,635	8,385	3,220	1	5	21
54		1,225	3,829	200	1	5	15
57		804	12,848	39	122	283	303
58		390	44,164	1,947	121	278	453
Totals	25,602	76,684	8,191	122	283	122	

	Dist. No.	Cabbage	Other Crops	Total Irrigated	Repairs	Improvements
43		1	775	23,566	\$ 2,800.00	\$ 830.00
54		1	210	22,585	3,451.00	...
57		1	524	25,276	1,830.00	...
58		1	524	13,691	455.00	410.00
Totals	1	1	1,509	47,728	\$ 8,536.00	\$ 1,240.00

REMARKS

All ditches on side streams omitted from this report, no water being available for them this year. Only such ditches were reported that received some water for the season.

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL
RESERVOIR REPORT FOR IRRIGATION SEASON OF 1936, DIV. NO. 6

Dist. No.	Reservoirs Reported	Area, High Water Line Acres	Capacity in Cubic Feet	Quantity of Water in Reservoir May 1 Cu. Ft.	Quantity of Water in Reservoir Nov. 1, Cu. Ft.
43	2	16	4,102,008	4,102,008	Empty
44	No report furnished by water commissioner				
54	1	30	17,569,888	8,677,416	Empty
55	No water commissioner				
56	No water commissioner				
57	9	346	164,090,685	13,123,246	Empty
58	28	438	137,275,499	107,770,499	25,003,440 (Simon No. 1)
Totals	40	830	323,038,080	133,673,434	25,003,440

Dist. No.	First Day Water Was Used	Last Day Water Was Used	Average No. of Days Water Carried	Average Daily Amount Water Carried Cu. Ft.	No. of Acre Feet Reservoir Water Carried
43	5- 5	6-10	9	3.75	90
54	6-22	7-25	33	6.00	*396
57	4-21	9-25	47	17.02	1,743.72
58	6- 5	9-15	14 2/3	34.08	2,125.50
Totals				60.85	4,355.22

*To Riley Livestock Co. Ditch.

Dist. No.	Alfalfa	Natural Grass	Market Garden	Total Irrigated	Repairs
43	40	...	...	40	\$0.00
54 .....	...	...	...	...	800.00
57	590	380	1	970	420.00
58	20	1,068	1	1,089	175.00
Totals	650	1,448	1	2,099	\$1,395.00

**ANNUAL REPORT OF IRRIGATION DIVISION ENGINEER
IRRIGATION DIVISION NO. 7, 1935**

M. C. Hinderlader,
State Engineer,
Denver, Colorado.

Dear Sir:

This is to submit the annual report for 1935 which covers hydrographic and water supply data, administration of decrees and the tabulations of the water commissioners' annual reports:

Hydrographic and Water Supply Data

Measurements and records of stream flow were obtained, computed and reported in the usual manner. The natural water supply for irrigation was the best since 1932. Stream flow continued in sufficient head to meet all irrigation needs for a longer period than usually occurs. That there would be an abundant supply of water was indicated early in the year as the accumulated snow depth at high elevations in the San Juan and Dolores watersheds was reported as being thirty-eight per cent in excess of normal. The following table of depths of snow on separate streams shows that on March 31st there was an average depth of 41 inches, the same being 8.5 inches and 31 per cent in excess of the mean, 37 inches and 410 per cent greater than on the same date in 1934.

Table of Accumulated Snow Depth in Inches

Stream	Elev.	Depth 1934	Depth 1935	Relation 1935-1934	Relation 1935-Mean	1935 % of Mean
Animas	8,900	0	40	+ 40	+ 10	133
La Plata	9,200	0	37	+ 37	+ 7	123
Pine	7,760	0	26	+ 26	+ 9	153
Dolores	10,000	36	60	+ 24	+ 8	115
Mean	8,970	9	41	+ 37	+ 8.5	131

Precipitation Table

Month	Mean at Four Weather Bureau Stations in San Juan Basin (Inches)	Departure from Normal	Per Cent of Normal
April	2.09	+ 0.61	141
May	2.50	+ 1.38	2.23
June	0.10	- 0.90	10
July	1.44	- 1.09	57
August	2.85	+ 0.33	113
September	2.50	+ 0.42	120

Temperature Table

Mean at Three Weather Bureau Stations in Irrigated Area

Month	Mean Temperature	Departure from Normal
April	42.8	- 0.8
May	48.4	- 2.7
June	60.7	No change
July	66.3	- 0.1
August	65.4	+ 1.2
September	57.9	+ 0.6
Mean	56.9	- 1.8

The excess precipitation and the lower than normal temperatures which occurred during April and May resulted generally in retarded stream flow during those months and excessive flow during June and July although the moisture in the latter two months was decidedly deficient with the temperatures about normal. With killing frosts occurring on May 6th and October 20th, a period between heavy frosts of 168 days.

While the month of May is reported as the wettest of 48 years of climatic history for the State as a whole, it was not so excessive in this section as on the eastern slope.

Table of Monthly, Seasonal and Yearly Run-off in Acre Feet in 1935 Compared with 1934 and Mean for the Period of Record

PINE RIVER NEAR BAYFIELD

	MONTH						Total	Total
	April	May	June	July	Aug.	Sept.	6 Mos.	Year
1934	27,000	32,000	9,700	6,270	7,130	9,400	91,500	124,700
1935	18,380	43,900	134,500	53,040	26,940	15,650	292,410	317,180
1935 % of 1934..	68	137	1,387	846	378	166	320	254
Mean for 8 Yrs..	20,860	56,050	68,810	29,020	22,240	15,760	212,740	249,730
1935 % of Mean..	88	79	196	183	121	99	137	127

DOLORES RIVER AT DOLORES

	MONTH						Total	Total
	April	May	June	July	Aug.	Sept.	6 Mos.	Year
1934	28,100	34,900	6,430	3,410	3,190	2,510	78,540	101,390
1935	32,030	67,130	133,800	32,560	15,890	10,740	292,150	306,240
1935 % of 1934..	114	192	2,081	957	498	428	372	300
Mean for 24 Yrs..	47,700	112,800	82,530	24,840	12,670	12,160	292,700	322,790
1935 % of Mean..	68	59	162	131	125	88	100	95

LA PLATA RIVER AT HESPERUS

	MONTH						Total	Total
	April	May	June	July	Aug.	Sept.	6 Mos.	Year
1934	3,800	3,190	946	627	627	613	9,803	13,538
1935	5,710	9,190	16,450	3,450	1,220	823	36,843	39,602
1935 % of 1934..	150	288	1,739	551	194	134	376	293
Mean for 19 Yrs..	5,350	12,080	9,650	2,400	1,650	1,450	32,580	36,284
1935 % of Mean..	107	76	171	144	74	57	113	109

FLORIDA RIVER NEAR DURANGO

	MONTH						Total	Total
	April	May	June	July	Aug.	Sept.	6 Mos.	Year
1934	8,330	9,650	1,270	682	904	1,170	22,006	27,971
1935	8,540	15,290	45,260	12,760	8,370	4,480	94,700	99,579
1935 % of 1934..	102	158	3,564	1,971	977	383	430	356
Mean for 20 Yrs..	8,130	25,060	30,300	9,470	5,460	4,420	82,840	92,350
1935 % of Mean..	105	61	150	135	153	101	114	108

ANIMAS RIVER AT DURANGO

	MONTH						Total	Total
	April	May	June	July	Aug.	Sept.	6 Mos.	Year
1934	43,100	75,000	23,500	13,000	12,700	13,200	180,500	250,530
1935	39,300	82,920	227,500	87,100	42,740	26,620	506,180	567,590
1935 % of 1934..	91	111	968	670	337	202	280	227
Mean for 36 Yrs..	59,430	157,300	188,800	78,860	39,800	33,840	558,030	665,650
1935 % of Mean..	66	53	120	110	107	79	91	85

It is of interest to note from the above tables that the flow during June varied from plus twenty per cent on the Animas River to plus ninety-six per cent on the Pine in the relation to the mean and for the entire year from eighty-five to one hundred twenty-seven per cent on the same streams. The flow of the

Dolores River was also low in per cent or relation to the mean as compared with the other streams which would indicate a greater depletion of the ground water at the beginning of the year and greater soil absorption on the Animas and Dolores watersheds which are the largest and the measuring stations at the lowest elevations. The flow during the month of July was from ten to eighty-three per cent above normal in spite of the fact that precipitation was only ten per cent of normal in June and fifty-seven per cent in July. The heavy snow cover at the beginning of the season and the abnormally low temperatures during April and May which held the snow at high altitudes accounted for this favorable factor.

The season of 1935 was as favorable as 1934 was the exact opposite. It is of further interest to note that during June, 1935, the monthly flow was from ten to thirty-six times that of 1934, varying on the several streams, and that for the six months period from April to September the 1935 run-off was nearly four hundred per cent in relation to 1934 as was indicated by the accumulated snow depth on March 31st.

Measurements and records of the flow into canals, to and from storage were also made. The summary of such diversions and records is compiled in the water commissioners' annual ditch and reservoir reports.

The amount of water in storage on May 1st was 15,500 acre feet and the total used for irrigation was 16,200 acre feet.

Administration

Administration of the decrees in the several water districts was had without any serious controversies with the water users. There was no water commissioner in district number 29 as the County Commissioners of the involved counties objected to the payment of the salary of a commissioner at large and since no regular commissioner has been appointed it was not found necessary to appoint a commissioner at large.

By legislative enactment, the boundary of Water District Number 32 was re-defined and definitely made to include only the lands situated in the westerly part of Montezuma County of which the principal drainage is McElmo Canon and its tributaries. Water District No. 46 was created from that part of No. 32 which is situated in the easterly part of La Plata County and which comprises the drainage of San Brito Arroyo and tributaries which have developed live water from seepage and which drain to the San Juan River below the mouth of the Piedra and above the mouth of Pine River. This enactment corrected a very confused situation in District No. 32 which formerly included lands geographically separated by Districts 31, 30, 33 and 34, and which had prohibited the adjudication of water rights in District 32 and which are now proceeding.

Crop Production

The average crop yield was the best in many years but there was some damage to seed in the ground during the germination period by pests of many kinds. As a result there were poor stands of cereal crops in some localities and this was particularly true of the stand of corn which was damaged by a commonly called maggot which ate the hearts out of the seed in the ground.

Two hundred sixty-two acres of crop in vine seed was reported as planted and harvested and two acres of flower seed crop. This is a relatively new crop for this section.

Irrigation Development and Improvements

All the aid that time would permit was given to the several water users' associations, ditch and reservoir companies in the making of surveys, reports and compilation of water supply data as preliminary work looking to the development of several storage projects, principally the Pine River and La Plata River Projects, but also the Florida, Mancos, Summit and Ground Hog Reservoirs.

There was more improvement made to canals and irrigation structures in general during the past year than for a great many years. Notably, was the improvement of the West Pine Unit and the completion of the La Boca Unit on Pine River by the U. S. Indian Service. The improvement of the West Pine Unit consisted chiefly of the enlargement of the Dr. Morrison Canal, construction of a concrete wasteway and measuring flume, a large inverted siphon at Dry Creek and the paving of a considerable part of the enlarged canal. The total expenditure by the Indian Service on this project was \$110,000.00. Another major item was the expenditure by the Montezuma Valley Irrigation Company of \$20,200 in the repair and maintenance of the system and \$8,355 in improvements. The improvements of the most importance were the replacing of a large section of the Morton Flume on the No. 2 Canal near McPhee by ditch; the placing of a reinforced transition of concrete to the tunnel on the Main Canal, a short section of concrete and timber lining in the tunnel, cleaning of the tunnel, the installation of new headworks for the diversion to the Narraguimepp Reservoir, underpass, spillway and flume on the U lateral, the installation of new measuring flumes and automatic recorders on the main canals.

A great number of new Parshall flumes were installed on ditches, as follows: thirty-three on the Dolores in District 34 and one on the Mancos, nine on the ditches from the Dolores and tributaries in District 69. All of the above were of timber construction and the installation was supervised by the water commissioner and deputy. This is the first time that the accurate measurement of water has been necessary in ditches on the Dolores and was made necessary by the decree of 1933.

Two concrete Parshall flumes were installed in District 31, one each on the King and Dr. Morrison Canals which take water from Pine River. Late in the year a new reinforced concrete diversion dam was placed in the river by the Spring Creek and Pine River Canal Company.

The total reported cost of repairs and improvements on canals was \$178,000 which is more than two times the amount expended in 1934 and eight times the amount spent in 1933. In addition there was spent \$8,065 in the repair of dams for storage. The principal item was \$8,000 by the Western Colorado Power Company in repair of the plank facing of the log crib, rock filled dam at Electra Lake. The upper portion of the facing had been replaced in 1925 but some settlement within the dam had caused breaks and open joints in the lower section of the facing, causing various small leaks which totalled six second feet. The work involved the excavation of the fill against the dam, the placing of 750 square feet of plank facing and replacing of the fill. The leakage was reduced to one second foot when the lake was re-filled.

The lake being pulled down for such repairs gave opportunity for an inspection of the log cribbing near the water face of the dam. The logs were found to be in solid condition. Excavation within the dam was also made to a depth of fifty-three feet at bed rock and the cribbing was found to be sound.

This dam was completed in 1906 and the finding of the timbers within the dam to be in solid condition and the general state of satisfactory condition of the dam as a whole after twenty-nine years is proof of the stability of this type of structure. The main trouble has been with leakage which has developed from time to time and which has been corrected.

It is expected that further large sums will be expended in the maintenance and improvement of the irrigated acreage and the protection of that acreage by development of storage.

Better highways have brought the San Juan Basin much nearer to the markets and the result has been a much better agricultural outlook than has previously existed and which can be realized by the storage regulation of the water supply.

Respectfully submitted,

J. R. WILLIAMS,
Division Engineer.

IRRIGATION DIVISION NO. 7

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL
DITCH REPORTS, 1935

Dist. No.	Number of Ditches	Number of Priorities Reported	Amount Appropriated in Cu. Ft.	Capacity of Canals in Cu. Ft.	Length of Canals in Miles	First Day Water Was Used
29.....	No report					
30.....	175	219	607	752	239	Apr. 1
31.....	65	80	690	959	189	May 27
33.....	41	70	591	390	60	Apr. 12
34.....	73	96	812	1,070	170	Apr. 2
69.....	27	14	65	105	21	Apr. 1
Totals.....	381	479	2,765	3,276	679	

Dist. No.	Last Day Water Was Used from Natural Stream	Maximum Number of Days Water Was Used	Average Number of Days Water Was Used	Average Daily Amount Diverted in Sec. Ft.	Number of Acres Foot Used from Natural Stream	Number of Acres That Can Be Irrigated
29.....	...	...	...	...	...	*43,000
30.....	Nov. 15	225	89	559	105,354	59,158
31.....	Oct. 15	142	102	590	120,390	57,163
33.....	Sept. 27	137	59	256	30,238	45,000
34.....	Oct. 26	208	98	680	133,439	74,016
69.....	Sept. 10	129	61	76	9,304	3,520
Totals.....					398,725	281,857

ACRES IRRIGATED

Dist. No.	Alfalfa	Natural Grasses	Cereals	Orchards	Market Gardens	Potatoes
29	No report					
30	10,833	4,600	8,196	697	24	704
31	13,257	12,031	11,105	206	69	259
33	6,985	190	5,516	128	...	610
34	13,817	14,942	11,241	1,203	293	1,337
69	1,001	1,215	581	21	...	33
Totals	45,893	32,978	36,639	2,255	386	2,943

*Estimated by Division Engineer.

IRRIGATION DIVISION NO. 7

ACRES IRRIGATED

Dist. No.	Seed Crops							*Total Irrigated
	Alfalfa	Clover	Vine	Flower	Beans	Other Crops		
29							25,000	
30							25,159	
31	38	5	19		81	100	37,171	
32							*3,000	
33							†14,362	
34			243	2	1,923	160	46,049	
69						128	2,979	
Totals	38	5	262	2	2,051	903	153,720	

*Estimated by Division Engineer.

†Includes 330 acres under undecreed ditches and not otherwise reported

IRRIGATION DIVISION NO. 7

District No.	Operation and Maintenance Costs (Dollars)			Improvements
	Superintendence	Repairs	Repairs	
30	\$ 3,268	\$ 14,612		
31	4,190	17,819		\$112,420
33	510	340		
34	2,855	22,123		9,925
69	.....	1,262		
Totals	\$ 10,853	\$ 56,156		\$122,345

IRRIGATION DIVISION NO. 7

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL RESERVOIR REPORTS, 1935

Dist. No.	Number of Reservoirs in District	Area of High Water Line (Acres)	Capacity in Cubic Feet	Amount in Storage on May 1st, Cubic Feet	Amount in Storage on November 1st, Cubic Feet
29					
30	3	899	26,972,352	96,970,320	948,214,080
31	1	354	1,056,299,280	77,144,760	15,428,952
33	1	37	25,102,541	25,102,541	0
34	909	519,111,600	518,299,300		
Totals	13	2,199	1,734,630,533	655,621,113	963,643,032

Dist. No.	First Day Water Was Used	Last Day Water Was Used	Number of Days Water Was Used	Average Daily Amount Used C.F.S.	Number of Acre Feet Used	Alfalfa	Natural Grasses
30	June 1	Sept. 20	23	15	*688		
31	None used						
33	July 5	Sept. 20	30	9	527	125	
34	May 1	Oct. 15	165	46	14,990	1,775	280
Totals....					16,205	1,900	280

*This is supplemental water for crops reported as irrigated from the natural stream. In addition to the above amount there was 20,700 acre feet used from Electra Lake through the hydro electric plant at Tacoma by the W. C. P. Co.

IRRIGATION DIVISION NO. 7

CROPS IRRIGATED FROM RESERVOIRS (ACRES)

Dist. No.	Cereals	Orchards	Market Gardens	Potatoes	Beans	Other Crops	Total Irrigated
30	.....	.....	.....	.....	.....	.....	.....
31	.....	.....	.....	.....	.....	.....	.....
33	105	.....	.....	35	35	25	325
34	1,950	200	.....	625	....	350	+18,312
Totals	2,055	200		660	35	375	18,637

†Includes 13,132 acres reported as irrigated from the natural stream.

IRRIGATION DIVISION NO. 7

OPERATION AND MAINTENANCE COST

District No.	Superintendence	Repairs	Improvements
30	\$ 350	\$ 8,000	.....
33	75	.....	.....
34	625	65	.....
Totals	\$ 1,050	\$ 8,065	.....

**ANNUAL REPORT OF IRRIGATION DIVISION ENGINEER
OF IRRIGATION DIVISION NUMBER 7 FOR 1936**

Durango, Colorado, December 10, 1936.

M. C. Hinderlader,
State Engineer,
Denver, Colorado.

Dear Sir:

The following report is respectfully submitted. The several phases of activities for the past season and the more important related subjects are under separate headings and are followed by a tabulation of the Annual Ditch and Reservoir Reports by Water Commissioners.

Water Supply

The amount of water in storage in ten reservoirs on May 1st was 27,000 acre feet, of which 15,000 was used for irrigation and 12,000 for development of electricity.

As reported by the Bureau of Agricultural Engineering, the Weather Bureau and co-operating agencies, the accumulated snow on the San Juan and Dolores watersheds on March 31st was thirty-eight per cent in excess of the average. The maximum snow depth and water content was reached about April 1st. Above normal temperatures and below normal precipitation occurred during the last three weeks of April, resulting in the melting and total disappearance of the snow from a large portion of the watershed.

The mean temperature at three stations within the farming area for April was 45 degrees, being 2 degrees above the mean. The mean precipitation was 0.08 inches, a deficiency of 1.25 inches. Above normal temperatures continued through May, June and July. Rainfall during those months was only a fraction below the average.

The run-off was early as shown by the following table:

Monthly Run-off in Acre Feet

Name of Stream	April	May	June	July
Pine River near Bayfield.....	40,550	80,750	40,420	17,280
Mean	20,860	56,050	68,810	29,020
1936 Per Cent of Mean.....	194	144	59	60
Dolores River at Dolores.....	72,100	106,600	49,650	12,900
Mean	47,700	112,800	82,530	24,800
1936 Per Cent of Mean.....	151	95	60	52
La Plata River at Hesperus.....	9,820	11,490	3,050	1,030
Mean.	5,350	12,080	9,650	2,400
1936 Per Cent of Mean.....	183	95	32	43

Note: The above estimates of flow are preliminary and subject to check.

Peak flows occurred on May 5th and 6th, which was nearly a month earlier than common. The flow during June and July as a consequence of the excessive run-off in April was 32 to 60 per cent of the average. While this did not bring about a serious shortage of water during those latter months on the larger streams, it did cause a shortage for users from the small streams and tributaries.

Rains commenced about the tenth of July and continued through August and September which increased the stream flow and was of direct benefit to crops.

Crop Production

Due to the early run-off in streams and to the excess temperatures the past season was unfavorable for small grain or cereal crops and the average yield of such crops was below the mean. The season was favorable for hay crops. The early water made the first cutting and timely precipitation made a second and in some instances a third crop of alfalfa. The yields of timothy and clover were very good and in some areas reported as the best crop ever raised.

Owing to increased transportation facilities, particularly roads, the production of orchard crops, potatoes and other perishables is increasing. The growing of vine and flower seeds and of certified seed is becoming one of the important agricultural industries in this division because of the quality due to the high altitude and the freedom from pest infestation.

Administration

Aside from the administration of the La Plata River Compact, of which there is a separate report, there was no particular difficulty experienced in adjusting the decreed water except that it was necessary to appoint a water commissioner at large in District No. 29 for a short period and deputies were employed in Districts 31 and 33. The employment of deputy in District 31 was made principally necessary on account of the ditches which take water from the headwaters of Pine River to the Rio Grande. Such ditches had to be closed when the water was needed to supply decreed rights on Pine River.

Hydrographic Data

Measurements and records of flow were obtained on the several streams as well as the necessary canal ratings. Hydrographic assistance is badly needed in this division for a short period during the spring and early summer months in order to do justice to the work.

New standard gaging stations were installed on the Animas River at Howardsville, Cement Creek and South Mineral Creek, all near Silverton, and for the purpose of a study in respect to the amounts of water available for diversion from the Animas

to the Rio Grande. A new standard recording station was installed on Pine River to replace the old shelter house and gage.

Other Activities

Two concrete Parshall flumes were installed on ditches to replace wood structures which are not satisfactory for this type of measuring flume. A timber control was placed in the channel of the La Plata River at State Line in order to maintain the point of zero flow at a certain elevation. It is doubtful if such a control will be permanent but the best possible construction was done with the money made available. The slope paving at the Animas Gaging Station was reinforced and grouted with concrete. On the La Plata at Hesperus a new footbridge was built, three hundred feet (lineal) of log crib with rock fill was placed to stop erosion of the river bank above the weir and several hundred cubic yards of rock and gravel was removed from the channel above and below the weir. The channel was again promptly filled with gravel during the early run-off.

The U. S. Bureau of Reclamation has taken over the Pine River Dam investigation for which one million dollars was made available by Congress, plans are now reported to be complete and ready for the letting of contracts for clearing, excavation and construction. This Bureau has made surveys of storage sites on the Florida, La Plata, Mancos and Dolores Rivers, together with surveys and classification of the irrigable lands.

The Summit Reservoir and Ditch Co. have worked all season in raising the flow line of the Summit Dam a height of seven feet, thus increasing the capacity from 2,500 to approximately 5,000 acre feet. This involved raising the dam ten feet for a total length of 9,300 feet. The inlet canal has been enlarged and improved. The total expenditure will approximate \$50,000 and the work is now estimated to be sixty per cent complete.

The Montezuma Valley Irrigation Co. has made plans to build or provide new storage on Ground Hog Creek. The capacity of the reservoir site is 22,000 acre feet. Surveys, core drillings, plans and reports are completed and an effort is being made to borrow the required funds, estimated as \$250,000, from the Reconstruction Finance Corporation.

The total sum of \$109,709 was reported as expended in the Division for superintendence, repairs and improvements of canal systems and reservoirs and for investigation of additional storage sites.

An inspection was made of all dams and a separate report is made as to the condition of the same as existed in June and in November.

Respectfully,

J. R. WILLIAMS,
Irrigation Division Engineer, Irrigation Division No. 7.

IRRIGATION DIVISION NO. 7

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL
DITCH REPORTS FOR THE IRRIGATION SEASON OF 1936

Dist. No.	First Day Water Was Used from Stream	Last Day Water Was Used from Stream	Number of Ditches Reported	* Number of Priorities Reported	* Amount Appropriated Cu. Ft.	Capacity Cu. Ft.	Length of Canals (Miles)
29			192	220	530	735	230
30			66	216	608	1,030	179
31			77	675			
32							
33			40	55	265	417	60
34			63	60	785	937	162
69			28	14	22	86	20
Totals	389	642		2,885	3,205		651

†No Report.

Dist. No.	First Day Water Was Used from Stream	Last Day Water Was Used from Stream	* Average No. Days Water Was Used	* Average Daily Amount Used Sec. Ft.	* No. Acre Feet Used from Stream	* No. Acres That Can Be Irrigated
29	Mar. 1	Nov. 15	125	300	75,000	43,000
30	May 1	Oct. 31	131	35	91,400	60,187
31			108	610	131,300	57,063
32						
33	Apr. 1	Sept. 15	55	191	20,980	46,000
34	Apr. 1	Oct. 21	86	671	115,370	73,375
69	Apr. 10	Sept. 7	58	69	8,000	3,371
Totals				2,351	442,050	352,996

Crops Irrigated

Dist. No.	Alfalfa	Natural Grasses	Cereals	Orchards	Market Gardens	Potatoes	Beans
29	9,524	4,578	7,537	654	114	579	3
30	13,061	12,340	10,877	213	57	322	88
31							
32							
33	6,604	974	5,839	112	22	437	77
34	14,313	14,283	11,578	1,201	38	1,143	1,959
69	970	705	790	21		105	
Totals	44,472	32,880	36,621	2,201	231	2,586	2,127

Crops Irrigated

Dist. No.	Sugar Beets	Other Crops	* Total No. of Acres Irrigated	No. Superintendence	Cost (Dollars)
29			* 25,000	\$ 3,750	
30			22,989	\$ 3,750	\$ 11,776
31		201	37,149	2,760	19,888
32			* 3,000		
33		273	14,338	No report	
34	100	1,445	46,060		* 36,345
69		70	2,661		1,274
Totals	100	1,989	151,197	\$ 6,510	\$ 69,283
					\$ 5,716

*Estimated by Division Engineer.

†Includes \$35,875 expended by the Montezuma Valley Irrigation Company for superintendence, repairs, improvements, taxes, interest, investigations of storage sites, etc., but not sub-divided to correspond with above headings.

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL RESERVOIR REPORTS, 1936

Dist. No.	Number of Reservoirs in Dist.	Area of High Water Line (Acres)	Capacity in Cubic Feet	Quantity of Water in Storage on May 1st (Cubic Feet)	Quantity of Water in Storage on November 1st (Cubic Feet)
30	1	899	1,089,238,410	571,768,500	950,304,960
31	1	354	95,169,888	95,169,888	15,420,240
33	3	36	23,523,491	23,523,491	0
34	3	909	551,634,188	496,648,390	8,052,300
Totals	10	2,198	1,759,565,967	1,187,110,269	973,777,500

Dist. No.	First Day Water Was Used	Last Day Water Was Used	Number of Days Water Was Used	Average No. of Days Water Was Used	Number of Acre Feet Used from Storage
30	July 1	Aug. 29	* 35	* 10	700
31	July 28	Aug. 8	† 366	† 30	21,900
33	June 9	Aug. 14	9	45	816
34	Apr. 1	Sept. 30	27	9	488
Totals			104	48	10,060

*Used for irrigation. †Used for power development.

Crops Irrigated					
Dist. No.	Alfalfa	Cereals	Orchards	Market Gardens	Potatoes
30	255	500	30		
31	550	460	614		
33	126	51	10	24	12
34	5,100	6,650	1,550	1	2,120
Totals	6,331	7,661	2,204	25	2,192

Crops Irrigated				Cost (Dollars)		
Dist. No.	Beans	Other Crops	Total Acres	Superintendence	Repairs	Improvements
30	350	1,330	800	\$ 1,200	\$ 4,900	
31			1,970	..	125	
33			223	50	50	
34			17,300	No report	..	* \$22,000
Totals	350	1,330	20,293	\$ 1,250	\$ 5,075	\$ 22,000

*Not reported by Water Commissioner but reported by secretary of Summit Reservoir and Ditch Co. as amount spent to Nov. 15 at Summit Dam.

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